

The *Fermi* GBM Gamma-Ray Burst Catalog: The First Two Years

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ABSTRACT

The *Fermi* Gamma-ray Burst Monitor (GBM) is designed to enhance the scientific return from *Fermi* in studying gamma-ray bursts (GRBs). In its first two years of operation GBM triggered on 491 GRBs. We summarize the criteria used for triggering and quantify the general characteristics of the triggered GRBs, including their locations, durations, peak flux, and fluence. This catalog is an official product of the *Fermi* GBM science team, and the data files containing the complete results are available from the High-Energy Astrophysics Science Archive Research Center (HEASARC).

Subject headings: catalogs – gamma-ray burst: general

1. Introduction

The *Fermi* Gamma-ray Space Telescope was launched on 11 June 2008 on a mission to study the universe at high energies. One of *Fermi*'s highest priority objectives is to help explain the physical mechanisms responsible for the powerful high-energy emission from gamma-ray bursts (GRBs). The *Fermi* Gamma-ray Burst Monitor (GBM) supports that goal by detecting and measuring the

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prompt emission from GRBs and providing quick notification to *Fermi*’s main instrument, the Large Area Telescope (LAT), as well as to ground-based observers. The broad energy coverage of the GBM (8 keV – 40 MeV) and the LAT (30 MeV – 300 GeV) combine to measure the emission spectra of sufficiently bright GRBs over more than seven decades of energy.

The on-board GBM trigger system for detecting GRBs was first enabled on 12 July 2008. In this paper we provide a catalog of GRBs that triggered the GBM during its first two years of operation. During this time the instrument burst detection algorithms were triggered 908 times: 492 of these are classified as GRBs, 79 as terrestrial gamma-ray flashes (TGFs), 170 as soft gamma-ray repeaters (SGRs), 31 as solar flares, 61 as charged particles and 75 as others (galactic sources, accidental statistical fluctuations, or too weak to classify). Of the 491 GRBs (in one case the same GRB triggered GBM twice), 18 were detected by the LAT with high confidence above 100 MeV (Abdo et al. 2011). Additional LAT detections using non-standard data types and techniques developed post-launch are also described by Abdo et al. (2011).

The GBM design is largely based on the Burst and Transient Source Experiment (BATSE) on the Compton Gamma Ray Observatory (Fishman et al. 1989), which operated from 1991 to 2000. Both instruments employ multiple sodium iodide (NaI) detectors to achieve full sky field of view, have on-board burst triggering capability, and use relative count rates to obtain approximate directions to bursts. GBM also includes two bismuth germanate (BGO) detectors that can better detect higher energy photons. BATSE, with significantly larger NaI detectors, had better sensitivity, while GBM has a broader energy range and higher data rate.

This catalog summarizes some basic characteristics of the triggered GRBs: sky location, duration, peak flux and fluence. Spectral characteristics derived from a standard analysis are described in a companion catalog (Goldstein et al. 2011). Detailed studies of various GBM GRB subsamples have been presented elsewhere (Guiriec et al. 2010; Ghirlanda et al. 2010; Lv et al. 2010; Bissaldi et al. 2011; Gruber et al. 2011a; Ghirlanda et al. 2011; Nava et al. 2011a,b; Zhang et al. 2011).

2. Instrumentation

GBM comprises twelve NaI scintillation detectors and two BGO scintillation detectors. The NaI detectors are 0.5 in. thick by 5 in. diameter and operate in the energy range 8 keV to 1 MeV. The performance of the NaI detectors at low energies is significantly enhanced by the use of beryllium entrance windows. Their positions and orientations on the spacecraft permit burst localization over the entire sky (unocculted by the Earth). The BGO detectors are 5 in. thick by 5 in. diameter and operate in the 200 keV to 40 MeV energy range. They are located on opposite sides of the spacecraft so that at least one of them is illuminated from any direction. The GBM flight software (FSW) continuously monitors the detector count rates to detect GRBs and other short-timescale transients, computes their location on the sky, provides a preliminary classification, and promptly

notifies the LAT of their occurrence. Once triggered, the FSW initiates prompt transmission of a subset of the data to the ground for quick-look analysis and notification of ground-based instruments via the Gamma-ray Coordinates Network (GCN). The instrument is described in more detail by Meegan et al. (2009).

The GBM trigger algorithms operate on background-subtracted count rates over a programmable range of timescales (from a minimum of 16 ms to a maximum of 16.384 s; currently the longest is 4 s) and in four different energy ranges (currently 25–50 keV, 50–300 keV, > 100 keV and > 300 keV). This is the primary method for detection of GRBs, TGFs, SGRs and solar flares.

Fermi’s use of the Ku band for downlink of science data allows GBM to have a higher data rate than BATSE, which generally translates to better time and energy resolution. Outside of a trigger, the GBM continuously transmits two types of science data: continuous time (CTIME) and continuous spectroscopy (CSPEC). The CTIME data have finer time resolution (nominally 256 ms but configurable from 64 ms to 1.024 s in units of 64 ms) and coarse energy resolution (8 channels). The CSPEC data have the full energy resolution (128 channels) but more coarse time resolution (nominally 4.096 s but configurable from 1.024 s to 32.768 s in units of 1.024 s). In this mode time-tagged event (TTE) data are also produced but not transmitted to the ground. The TTE data consist of individual detector events, each tagged with arrival time ($2\ \mu\text{s}$ resolution, accurate to $\sim 10\ \mu\text{s}$), energy (128 channels) and detector number. These non-triggered TTE data are temporarily stored on-board in a ring buffer with a capacity of 512,000 events, which lasts for 25–30 s at typical background rates.

Upon entering trigger mode, the FSW speeds up CTIME resolution to 64 ms and CSPEC resolution to 1.024 s. In addition, the TTE data are transmitted directly to the science data bus instead of being stored in the ring buffer (the contents of which are frozen for later downlink). The production of prompt TTE lists for approximately 300 s, at which point the contents of the pre-trigger ring buffer are dumped to the science data bus. After an additional 300 s, the CTIME and CSPEC data are returned to their non-triggered time resolution and the FSW exits trigger mode.

The basic trigger design follows that used for BATSE: to trigger, two or more detectors must have a statistically significant rate increase above the background rate. Requiring two detectors to be above their respective thresholds makes triggering on statistical fluctuations less likely, and much more importantly, it suppresses triggering due to non-astrophysical effects that appear in only one detector, such as phosphorescence spikes. Each algorithm has its own threshold setting, configurable from $0.1\ \sigma$ to $25.5\ \sigma$ in units of $0.1\ \sigma$. The background model is a trailing average of the detector data. Whereas BATSE used three trigger algorithms (a single energy range, usually 50–300 keV, and three timescales, 64 ms, 256 ms & 1.024 s), the GBM FSW supports up to 119 trigger algorithms. A given algorithm is defined by its timescale, offset and energy range. The offset is a value in milliseconds by which the time binning is shifted. Running overlapping accumulations for a given combination of timescale and energy range provides some improvement in trigger sensitivity

(Band 2002; Band et al. 2004).

While in trigger mode, the FSW continues to monitor other enabled algorithms and records all instances where a given algorithm would also have triggered on the same burst. A special *compute* mode is available in which an algorithm is monitored during a trigger (initiated by any other algorithm) to determine if its threshold is exceeded but no triggers can actually be initiated by that algorithm.

The FSW classifies triggers based on a number of criteria, including the event localization, spectral hardness, and the spacecraft geomagnetic latitude (McIlwain L coordinate). A Bayesian approach is used to assign identification probabilities for various event classes, including GRB, solar flare, SGR, particle precipitation and known transient sources. Classification of TGFs is a special case: early in the mission it was observed that these events trigger NaI detectors exclusively on the combination of shortest timescale (0.016 s) and one of the high energy ranges (> 100 keV or > 300 keV).

While in trigger mode, the FSW continues to monitor the detector rates on various timescales and, based on improved statistical significance, updates of the localization and classification may be generated and transmitted in the quick-look science data.

3. In-Orbit Operations

3.1. Trigger Criteria

GBM triggering has been enabled continuously since 12 July 2008, except during South Atlantic Anomaly passages and a few brief intervals when FSW upgrades were being installed. Early in the mission the trigger algorithms used only data from the NaI detectors. This turned out to be a limitation for TGFs because they are spectrally much harder than GRBs. In November 2009 the flight software was revised to add trigger algorithms that use the BGO detectors, which significantly improved the GBM sensitivity for detecting TGFs.

In orbit, the GBM has enabled 71 trigger algorithms, five of which are TGF-specific algorithms that use the BGO detectors alone or combined with NaI detectors. No GRB has ever triggered only on a TGF-specific algorithm, so they are not discussed further in this paper. Table 1 summarizes the 66 algorithms relevant for this catalog, the times during which they were enabled and the history of their threshold settings.

During the first year most of the algorithms were enabled and a few minor adjustments made to their thresholds. Exceptions are the 16-second algorithms (numbers 20, 21, 41 & 42), which were deemed too sensitive to background variations and disabled after ~ 2 weeks. After nearly a year's experience, it was judged that a large number of the algorithms were of dubious value because they never triggered on an event that did not also trigger another algorithm. This list included all of the

8-second algorithms as well as most of the algorithms not operating in the standard BATSE energy range (50–300 keV). In order to ease the computational burden on the FSW, these algorithms were disabled in early July of 2009. The configuration in the rightmost column of Table 1 remained the same through the remainder of the period covered by this catalog.

Direct comparisons between the BATSE and GBM datasets are possible since GBM includes the same three trigger algorithms used by BATSE (64, 256, and 1024 ms time scales in the 50 to 300 keV energy range). Depending on which set of the half-bin offset algorithms are considered as the BATSE algorithms, we find that either 405 or 408 of the 491 GRBs would have triggered GBM, in agreement with pre-launch estimates of 200 bursts/year (Meegan et al. 2007). Using both sets of overlapping windows raises the total number of triggers to 423, leaving 68 events which did not trigger on any BATSE-style algorithms. Of these, 63 (93%) triggered the longer (> 1.024 s) timescale algorithms in the 47 to 291 keV energy range, three triggered only the 512 ms algorithm in 47–291 keV, and two triggered only in the 23–47 keV energy range (one each in 64 ms and 2.048 s). Thus, the apparent improvement in trigger sensitivity relative to BATSE is attributable mainly to GBM’s additional longer trigger timescales.

3.2. Quick-look Analysis

As described above, quick-look data are generated during trigger mode and promptly transmitted to the ground. For events classified as GRBs, the FSW-generated localization and classification information is further distributed via GCN notices. Also for GRBs, additional GCN notices containing ground-generated localizations are produced and distributed automatically. The GBM location algorithm is an adaptation of the method developed for BATSE (Pendleton et al. 1999). Both FSW and ground locations use the count rates in all 12 NaI detectors to point back to a preferred direction on the sky by comparing observed rates to model rates and minimizing χ^2 . The model rates are a combination of counts that come directly from the source into the detector, counts from the source scattered in the spacecraft into the detectors, and counts from source photons that hit the Earth’s atmosphere and are scattered into the detectors. All three of these components are a function of the source intensity, its spectrum, and the source-spacecraft geometry, with the final component also depending on the source-spacecraft-Earth geometry. For automated locations onboard and on the ground, the background count rate subtracted from the observed counts is an average over a 16 s interval before the burst trigger occurred. However, the ground automated localizations differ from the flight locations in several ways:

1. Although the two decision making processes use the same rates data type, they run independently with different criteria and do not necessarily use rate data from the same time intervals.
2. The ground process has access to location tables generated with finer sky resolution (1° , compared to 5° for the FSW).

3. The ground process includes a more accurate treatment of atmospheric scattering (based on the actual orientation of the spacecraft with respect to the Earth, whereas the FSW assumes zenith-pointing for all model rates).
4. The ground process incorporates the spectrum of the source into the calculation of the expected rates by choosing one of three location tables based on the hardness of the burst as determined by the ratio of counts > 50 keV to counts < 50 keV.

The GBM team assigns a burst advocate (BA) to inspect the real-time data promptly and perform additional analysis as appropriate. Normally the BA will generate additional localizations and optionally distribute these via the GCN (circulars were used during the time period of this catalog but currently GCN notices are used). These “human-in-the-loop” localizations use source and background time intervals and model fits selected by the user based on the entire quick-look data set, which extends from 200 s pre-trigger to 450 s post-trigger. The BAs typically run the location code several times, using different selections of time interval and/or background models, and select a best location using statistical error and goodness-of-fit criteria. This is particularly useful in verifying that separate pulses are consistent with the same sky location. The FSW classification is reviewed by the BA, usually in consultation with other GBM team members, and may be corrected based on inspection of the GBM quick-look data and/or additional information such as detection by another instrument.

4. Catalog Analysis

4.1. Burst Localization and Instrument Response

Determination of the approximate burst sky location is important because the other results reported in this catalog and the companion spectroscopy catalog (Goldstein et al. 2011) require instrument response functions that are dependent on the direction of the burst relative to the detectors and to the Earth. Most of the burst locations reported in this catalog are the result of the manual on-ground analysis, typically by the BA as described in Section 3.2. If, however, the burst was also localized with better precision by another instrument (e. g., *Swift* or the LAT) that location was used instead to derive the GBM instrument response for the subsequent catalog analysis. A total of 76 bursts have locations from *Swift*; 63 of these triggered the *Swift* Burst Alert Telescope (BAT) and 5 more were detected in ground analysis of BAT data. The remaining 8 were located by the *Swift* X-Ray Telescope following detections of prompt emission by other instruments.

The accuracy of the GBM burst localizations was checked by comparing the independently-derived GBM locations with a sample of higher precision locations obtained by other instruments for the same GRBs. Using 127 bursts with known locations (some of which occurred after the end of the current catalog), we find that the true GBM human-in-the-loop location errors are best described by combining the statistical error in quadrature with a systematic error, where the current

best model for systematic errors is 2.6° with 72% weight and 10.4° with 28% weight. As the actual statistical error contours are not circular, it is instructive to see how many of the more precise burst locations fall within our quoted statistical error circle. Of those 127 bursts, 51 (40%) are within the 1σ statistical error radius, 93 (73%) are within twice the 1σ radius and 107 (84%) are within 3 times the 1σ radius. A more detailed analysis of the GBM location errors is in progress and will be reported later (Connaughton et al. 2011).

Figure 1 shows the sky distribution of the GBM-detected GRBs in celestial coordinates. The large-scale isotropic distribution is well-known from BATSE observations (Briggs et al. 1996) and the GBM distribution appears to be consistent with this.

4.2. Duration, Peak Flux & Fluence

In addition to the burst locations, the present paper reports various measures of the duration, peak flux and fluence of each burst, with a few exceptions due to analysis difficulties such as incomplete data or background interference. The burst durations T_{50} and T_{90} ¹ were computed in the 50-300 keV energy range. The fluence for each burst was computed in two energy ranges: 50-300 keV and 10-1000 keV. Peak fluxes for each burst were computed in these same energy ranges and for three different timescales: 64 ms, 256 ms and 1024 ms.

Burst durations were determined using a method similar to that developed for BATSE (Kouveliotou et al. 1993; Koshut et al. 1996). However, in the BATSE analysis all quantities were derived from the counts directly, whereas in the present analysis the counts spectrum in each time bin is deconvolved and the durations are computed from the time history of fitted photon spectra. Peak fluxes and fluences are naturally obtained in the same analysis, using the same choices of detector subset, source and background intervals and background model fits. Unlike CGRO, which was inertially pointed in the same orientation for weeks at a time, the *Fermi* observatory has been operated in an all-sky survey mode during the period covered by this catalog. To optimize sky coverage the spacecraft sweeps its z-axis across the sky at a specified angle perpendicular to the orbit plane (currently 50°), rocking on alternate orbits above and below the orbit plane by the specified angle. Within a given orbit *Fermi* also executes a slow roll about the z-axis to maintain optimal orientation of the solar panels with respect to the sun. In the energy range of interest the response of a given GBM NaI detector varies approximately as the cosine of the angle between the source direction and the detector axis. Therefore as *Fermi* slews, the detector to source angle changes and hence so does the response, with the rate of change being different for each detector. This was not a factor for BATSE, where inertial pointing kept the source to detector angles constant for extended periods. The most accurate correction for the response changing over time is a spectral deconvolution

¹ T_{50} is the interval between the times where the burst has reached 25% and 75% of its fluence. T_{90} is similarly defined between 5% and 95% of the fluence.

(assuming that the changing response is tracked correctly), so we have adopted the deconvolved flux history as our basis for determining the duration parameters. Furthermore, comparisons from burst to burst of the peak flux and fluence will not be compromised by differences in response arising from different source angles, as they would be for the raw counts. Finally, a fluence that is obtained by integrating a deconvolved flux history incorporates spectral evolution throughout the event in a way that summed counts can never attain, due to the loss of temporal information from the summing. Appendix A describes the procedure in some detail.

For each burst, a set of NaI detectors was chosen with good source viewing angles ($< 60^\circ$) and no apparent blockage by any other element of the spacecraft. For the majority of bursts the GBM CTIME data, which have 256 ms time resolution pre-trigger and 64 ms resolution post-trigger, were used. TTE data were used for bursts where at least one of the peak fluxes occurs at or before the trigger time, which happens for many short bursts and a few longer ones. A limitation is that the pre-trigger TTE data typically span at most 30 s, which in some cases was not enough for computing the background and for some long bursts included significant burst emission. In such cases, the analysis was done with CTIME data. When using TTE data, which have 256 channels of energy resolution, it was often found that the deconvolution analysis is more robust if the 256 pulse-height channels were first summed into 8 channels, as in the CTIME data. Because of the relatively small number of bursts with detectable emission in the BGO detectors, only data from the NaI detectors was used for the catalog analysis.

5. Catalog Results

The catalog results can be accessed electronically through the HEASARC browse interface (<http://heasarc.gsfc.nasa.gov/W3Browse/fermi/fermigbrst.html>). Standard light curve plots for each burst can be viewed at http://gammaray.nsstc.nasa.gov/gbm/science/grbs/month_listings/. Here we provide tables that summarize selected parameters.

Table 2 lists the 492 triggers that were classified as GRBs. The GBM Trigger ID is shown along with a conventional GRB name as defined by the GRB-observing community. For readers interested in the bursts with significant emission in the BGOs, the trigger ID and GRB name are highlighted in italics if emission in the BGO data (above 300 keV) is visible in the standard light curve plots.² Note that the entire table is consistent with the small change in the GRB naming convention that became effective on 1-Jan-2010 (Barthelmy et al. 2009): if for a given date no burst has been “published” previously, the first burst of the day observed by GBM includes the ‘A’ designation even if it is the only one for that day. The table lists the GBM-derived location only if no higher-accuracy locations have been reported by another instrument. The choice of a

²These BGO-detected identifications are the result of a visual search rather than a quantitative analysis and thus do not have a well-defined threshold.

higher-accuracy location is somewhat arbitrary (e. g., Swift-BAT locations are often listed even if a Swift-XRT location is available); for the GBM analysis, location accuracy better than a few tenths of a degree provides no added benefit. The table also shows which algorithm was triggered along with its timescale and energy range. Note that the listed algorithm is the first one to exceed its threshold but it may not be the only one. Finally, the table lists other instruments that detected the same GRB. Many of these are determined by inspection of web-based tables and/or light curves. For some instruments (e. g., Suzaku-WAM) no automated trigger was generated but the GRB is clearly visible in a web-accessible light curve. Those cases are shown with an asterisk in Table 2.

The results of the duration analysis are shown in Tables 3, 4 & 5. The values of T_{50} and T_{90} in the 50–300 keV energy range are listed in Table 3 along with their respective statistical error estimates and start times relative to the trigger time. For a few GRBs the duration analysis could not be performed, due either to the weakness of the event or to technical problems with the input data. Also, for some GRBs the results are underestimates, either because of Earth-occultation or because the input data were truncated by SAA entry. Finally, for technical reasons it was not possible to do a single analysis of the unusually long GRB 091024A (Gruber et al. 2011b), so the analysis was done separately for the two triggered episodes. These cases are all noted in the Table. The reader should also be aware that for most GRBs the analysis used data binned no finer than 64 ms, so the duration estimates (but not the errors) are quantized in units of 64 ms. For a few extremely short events (noted in the table) TTE data were used with 32 ms or 16 ms binning.

As part of the duration analysis, peak fluxes and fluences were computed in two different energy ranges. Table 4 shows the values in 10–1000 keV and Table 5 shows the values in 50–300 keV. As discussed in Appendix A, the analysis results for low fluence events are subject to large systematic errors and should be used with caution.

6. Discussion

Histograms of the T_{50} and T_{90} distributions are shown in Figure 2. Using the conventional division between the short and long GRB classes ($T_{90} = 2$ s), we find 88 (18%) of the 487 measured GRBs to be in the short classification. Within the quoted duration errors, the number of short GBM events ranges from 73 (15%) to 104 (21%). For comparison, the fraction of short events in the BATSE GRB catalog is 24%. The difference from BATSE is probably not due to a deficit of short events but rather to an excess of long events detected by GBM’s longer timescale trigger algorithms (see Section 3.1).

The anti-correlation of spectral hardness with duration is well known from BATSE data (Kouveliotou et al. 1993) and a simple analysis shows that such an effect is also present in the GBM catalog. Time-resolved spectral fits for each GRB are a by-product of the duration analysis and those photon model fit parameters were used to derive a measure of average spectral hardness. Figure 3 shows scatter plots of hardness derived in this way as a function of duration for the

two duration measures. Although the effect of the 64-ms duration quantization is noticeable, the anti-correlation of hardness vs. duration is visibly evident in the GBM data.

Integral distributions of the peak fluxes are shown in Figures 4–6 for the three different timescales and separately for short and long GRBs. For the long GRBs, deviation from the $-3/2$ power-law that would be expected if the GRBs were spatially homogeneous occurs well above the GBM threshold at a flux value of $\sim 10 \text{ ph s}^{-1} \text{ cm}^{-2}$. This is consistent with earlier BATSE measurements (Paciesas et al. 1999), which have much better statistics. For the short events the GBM data appear consistent with a homogeneous spatial distribution down to peak flux values around $1 \text{ ph s}^{-1} \text{ cm}^{-2}$ (50-300 keV), below which instrument threshold effects become dominant. The integral fluence distributions for the two energy intervals are shown in Figure 7.

7. Summary

The first GBM catalog includes 491 cosmic gamma-ray bursts that triggered GBM between 12 July 2008 and 11 July 2010. Compared to BATSE, GBM has a higher threshold for burst detection but this is somewhat ameliorated by GBM’s additional range of trigger timescales (primarily the 4 s timescale) and, to a lesser extent, trigger energy ranges. The distribution of GBM durations is consistent with the well-known bimodality measured previously. The fraction of short GRBs in the GBM sample is somewhat smaller than detected by BATSE, which is attributed mainly to GBM’s ability to trigger on longer timescales.

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A. Computation of Duration, Peak Flux and Fluence

For the catalog analysis, a standard calculation of durations, peak fluxes and fluences was implemented as an add-on to the RMFIT software package that was developed for time-resolved analysis of BATSE GRB data but has been adapted for GBM and other instruments. For each burst, selections of the detectors and data types to be used for the catalog analysis were performed by the user based on uniform criteria as described in the main text. The remainder of this appendix describes the procedure and some caveats.

After the data have been selected for a given GRB and read into `rmfit`, a background model, polynomial in time, is computed separately for each detector, based on user-selected time intervals. The intervals normally include sections earlier and later than the evident burst emission, such that the background model can be interpolated through the entire time of burst activity. In some cases, the background selection includes quiescent portions between pulses of the GRB, if such regions are clearly identifiable. As a final preparation step, the interval for the duration analysis is chosen to cover the entire burst emission in time, as well as overlapping with the background selections. Figure 8 is an example CTIME light curve for GRB 081009A, showing the background and source selections used for the duration analysis.

The next step involves joint spectral fits using the selected detectors for each time bin in the selection, including the background regions before and after the burst. The user is prompted to input a default set of photon model parameters that are used when one or both of the spectral shape parameters is undetermined by the data in an individual fit, which often occurs for those spectra in the selection region that consist of background intervals with the background model subtracted. In those cases where the model parameters tend toward unbelievable values, we fix that parameter to the default value and redo the fit. A poor estimate of the residual spectrum may result in very poor spectral fits, dominated by the default model parameters, so the selection of these values may be crucial, especially for weak bursts. In many cases, the duration estimate is more robust when the default parameters are set to values that are representative of the background itself (typical values are $E_{\text{peak}} = 70$ keV, $\alpha = -1.0$). Although this improves the duration analysis, it may introduce additional systematic errors in the computation of the fluences and peak fluxes.

The choice of photon model to fit is dictated by the sparse data statistics: the GBM TTE default time binning and CTIME post-trigger accumulation interval is 64 ms, resulting in average source counts that are an order of magnitude less than usually required for high-quality spectroscopy ($> 45\sigma$). The model chosen for the catalog analysis is an exponentially cut-off power law, parameterized such that the characteristic energy (E_{peak}) is identical with the peak in νF_{ν} (the so called “COMP” model in RMFIT). This model lacks a non-thermal high-energy power-law, which is ideal, since it is precisely that parameter that would be least constrained by the sparse data at high energies. At the same time, it is desirable to constrain the three model parameters that describe the COMP photon model: amplitude, power-law index and E_{peak} . Hence it is preferable to use datatypes that have few energy channels, so that there are better statistics in the channels at hand. CTIME, with 8 energy channels, is usually the best choice, but the pre-trigger time resolution of 256 ms is a limitation for most short bursts as well as a few longer ones. In those cases TTE data may be preferred. Native TTE data have the full 128 channels available; however, for the duration analysis these are usually summed to match the energy channels of the corresponding CTIME data.³ The data are fitted to the available CTIME energy channels, which cover the

³For the duration analysis separate software is used to produce a new datatype with 8 energy channels, called CTTE, that is then read into `rmfit`. This is necessary because by design `rmfit` always uses the raw energy binning of

approximate energy range 10–1000 keV.

The goal in this analysis is to produce uncertainties in the flux determinations that are no worse than the statistical uncertainties due to the counts, while retaining the advantages of correcting for the detector response, which is only possible by doing a spectral fit. Just as important, we do not have to reproduce a detailed temporal spectral analysis for each burst, which would require summing the data over time until a significant sample has been accumulated and would also require better spectral resolution and more complicated spectral models. Instead, we only require that the spectral fit in each time bin be reasonably accurate over the energy bins used for the duration calculation (50–300 keV). Thus, it is unlikely that the presence of hard emission (such as a high-energy power law, as opposed to our choice of an exponential roll-off at high energies) in the data would make a significant contribution to the flux integral. The duration energy range is covered by the maximum in the detector response, so the spectral fit is best determined for those energies. The flux uncertainty is calculated from the covariance matrix of the fit, so sparse data, such as the background-subtracted background time bins, result in uncertainties that are dominated by the best-determined value: the amplitude, which in this case, is driven quite accurately to zero. Finally the fitted spectra are further constrained by the required consistency in the joint fit using data from several detectors. The spectral parameters and goodness-of-fit for the spectral fit to each time bin may be found in the catalog data files. For most bursts, the mean goodness-of-fit per degree of freedom is quite consistent with each fit over the entire set of time intervals fitted, indicative of normal statistics. For some bright bursts, the model may not be adequate, resulting in higher values of the fit statistic. However, the excess residuals are typically outside the 50–300 keV energy range, so the effect on the duration calculations is minor.

After the background, source and model parameter selections have been made, every time bin in the selection is background subtracted, fitted using the model and the resulting fitted spectrum is integrated over the appropriate energies to obtain a flux history. For comparison with the BATSE duration distribution, the energy range of 50–300 keV was chosen for this catalog. Errors for each integrated photon flux are derived using the covariance matrix for the fit, taking into account the uncertainties of each fitted model parameter. The resulting photon flux history (see, e. g., Figure 9) is summed over time, to produce a cumulative fluence plot, as seen in Figure 10. In this plot, the background-subtracted background intervals should, on the average, contribute zero to the total fluence, as seen in the left-hand portion of the figure, at times before the trigger time, and at the right-hand portion, well after the the burst has concluded. In reality, depending on how well the seeded model fit parameters match with the fitted residuals, the flux histories in these two regions can exercise a random walk away from constant zero residual flux, as seen in Figure 11. Similar trends are present in the data in Figure 10 but they are small relative to the burst and hence not noticeable. In most cases, the random walk over the background accumulation does not exceed 1 ph-cm^{-2} , setting a practical limit of $> 2 \text{ ph-cm}^{-2}$ in total fluence for the duration analysis to be

the input data for spectral fitting.

reliable. Treating this as a hard threshold would, however, bias the catalog against short bursts, which often have lower fluences, so results for weaker bursts are included herein but should be treated with caution.

To calculate the duration, the two ‘plateau’ regions must be identified by hand (since every such plot is unique, this step can not be automated); the average flux in each serving as the fiducial values against which the partial fluences at 5, 25, 75 and 95% of total are determined. At each fraction of the total fluence, its intersection with the integrated flux history is projected vertically onto the time axis, giving four time values, t_5, t_{25}, t_{75} and t_{95} . The duration measure is defined as: $T_{90} = t_{95} - t_5$, or the interval between the times where the burst has reached 5% and 95% of its total emission in the 50–300 keV band. As shown by Koshut et al. (1996), the robustness of the T_{90} estimate for the duration relies upon the integrated flux history being single-valued at the two fractional fluence values. This, in turn, implies that the fluence levels at t_5 and t_{95} should be somewhat larger than the variance of the corresponding nearest plateau region; otherwise, there is confusion as to which time to be used to identify each of these. $T_{50} = t_{75} - t_{25}$ is based upon flux levels that are presumably further away from the random-walk levels, and thus is considered to be more robust than T_{90} .

Following Koshut et al. (1996), the variance of the two residual plateau intervals is used as a basis for the error estimates for T_{90} and T_{50} . For that reason, the plateau regions are chosen to contain enough samples that their variance is representative of the residual fluctuations in the background-subtracted background time bins. Our estimation of the background evolution in time is based upon a polynomial fit over user-selected regions before and after the GRB emission start and end times; for the best results, the plateau selection should overlap with the regions selected for the fitting of the background. Ideally, the residuals from the background fit should then be zero in the region where the plateau selections overlap the background selections, but in practice the background-subtracted time bins in the background regions have fluctuations that can be as large as 1 ph-cm^{-2} . These small, higher-order fluctuations drive the uncertainty calculation for the flux levels, since the variance measures our inability to precisely determine the zero and 100% levels. Once the variances in the flux histories are known, they are converted into uncertainties by first scaling by the desired flux level and taking the square root:

$$error_{\text{flux}_{nn}} = \sqrt{(1 - nn)^2 Var_0 + nn^2 Var_{100}}, \quad (\text{A1})$$

where $nn \in \{0.05, 0.25, 0.75, 0.95\}$ indicates the various flux levels and Var_0 and Var_{100} are the variances from the zero and 100% fluence level plateaus. For each of the four nominal fluence levels nn , $error_{\text{flux}_{nn}}$ is added and subtracted, resulting in a projected uncertainty in time for each. The final uncertainty in T_{90} is the root-mean-square of the corresponding uncertainties in t_5 and t_{95} and similarly with the projected uncertainties in t_{25} and t_{75} for T_{50} . The start time, relative to the burst trigger time, is also recorded for each of the time intervals that form T_{90} and T_{50} .

The flux history used in the calculation of the burst duration can be used to derive several other important quantities. The total fluence is calculated by differencing the zero and 100%

integrated flux levels, as determined by the plateau selections. In each successive time bin the flux model from the fit is weighted by energy in erg, integrated over two energy bands, 50–300 keV and 10–1000 keV, and then added to the running total to produce the cumulative fluence. The variances of the two plateau regions are added together in quadrature to determine the uncertainty in the fluence. As with the T_{90} calculation, it is the variance in the background regions (where the running sum should be zero) that determines the uncertainty of the zero level fluence (and similarly for the total fluence). Given the limited range of integration for the 50–300 keV fluences, the fact that we chose to use the COMP photon model makes little difference to the results; however, this may have a more significant effect on the 10–1000 keV fluences. The affected bursts are primarily the ones with significant emission in the BGOs, which are highlighted in Table 2. In any case, the fluences derived in this catalog are intended mostly as a ranking tool. Readers interested in more robust fluence estimates should consult the GBM spectroscopy catalog (Goldstein et al. 2011).

The deconvolved photon flux history is calculated by integrating the best fit model for each time bin over the two energy bands described above. The peak flux is then the maximum value of the flux history between the lower and upper plateaus for the two energy bands, as well as for three different time intervals: 64, 256 and 1024 ms. As the native or default accumulation for the CTIME data post-trigger is 64 ms, there is only one possibility for binning, as long as care is taken to ensure that the peak flux interval occurred after $T = 0$, as is usually the case for long GRBs. For short GRBs, TTE is preferred, since much of the emission can occur pre-trigger, and TTE can be binned in 64 ms accumulations over its entirety. In order to calculate the 256 and 1024 ms peak fluxes, the available data are binned within a sliding window. CTIME pre-trigger accumulations are 256 ms by default, so only the post-trigger data need to be binned. In this case (CTIME), the peak flux is the maximum flux found either pre-trigger or in one of the sliding binning windows post-trigger. The time and value of the peak flux and its uncertainty are recorded, again calculated from the model fit, along with the uncertainties of the model parameters and the covariance matrix between the parameters, computed in the usual manner.

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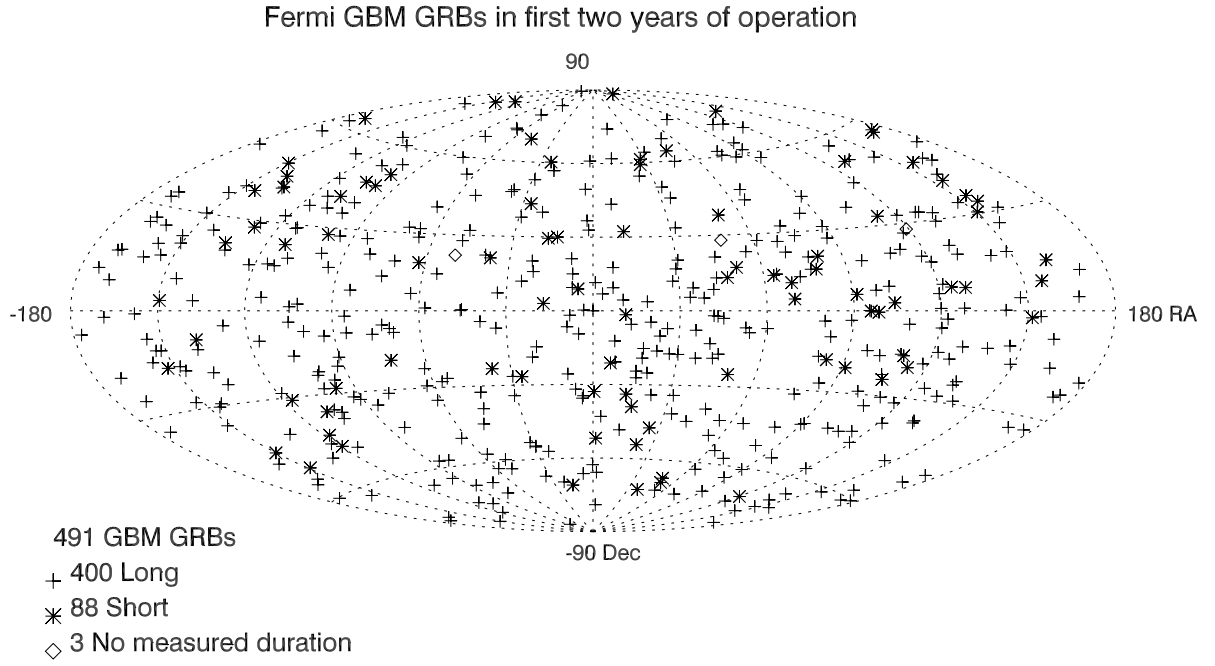


Fig. 1.— Sky distribution of GBM triggered GRBs in celestial coordinates. Crosses indicate long GRBs ($T_{90} > 2$ s); asterisks indicate short GRBs.

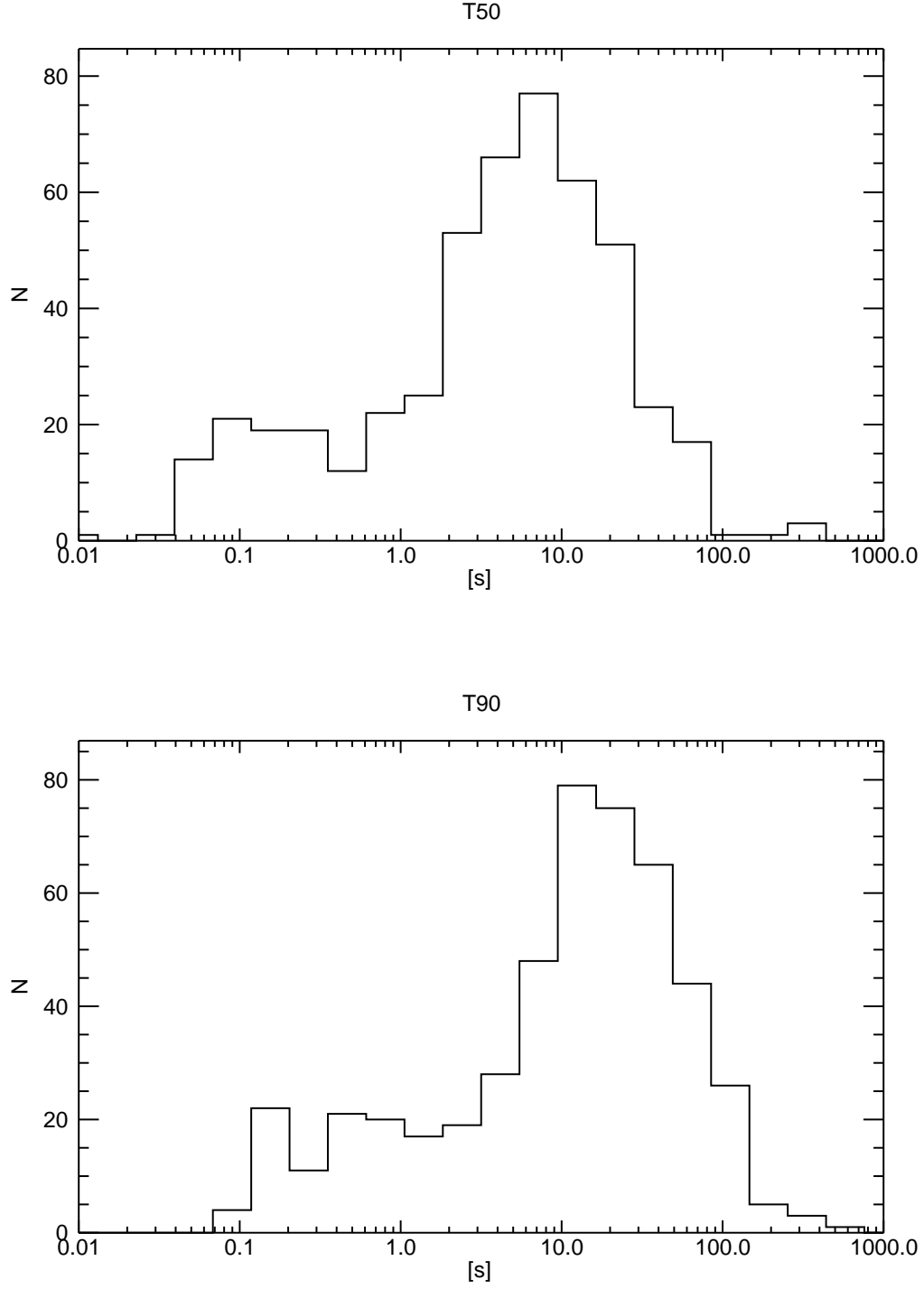


Fig. 2.— Distribution of GRB durations in the 50–300 keV energy range. The upper plot shows T_{50} and the lower plot shows T_{90} .

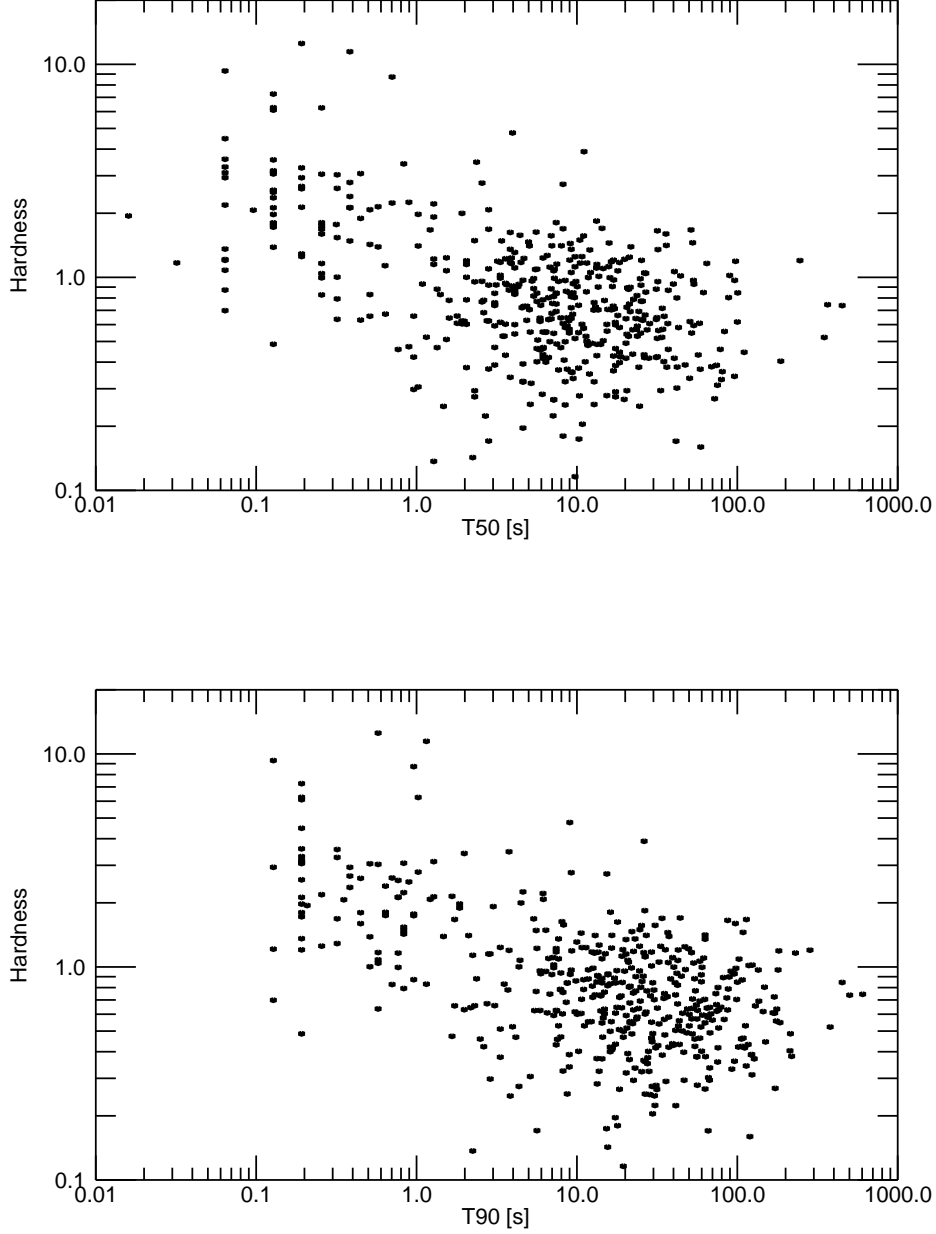


Fig. 3.— Scatter plots of spectral hardness vs. duration are shown for the two duration measures T_{50} (upper plot) and T_{90} (lower plot). The spectral hardness was obtained from the duration analysis results by summing the deconvolved counts in each detector and time bin in two energy bands (10-50 and 50-300 keV), and further summing each quantity in time over the T_{50} and T_{90} intervals. The hardness was calculated separately for each detector as the ratio of the flux density in 50-300 keV to that in 10-50 keV and finally averaged over detectors. For clarity, the estimated errors are not shown but can be quite large for the weak events. Nevertheless, the anti-correlation of spectral hardness with burst duration is evident.

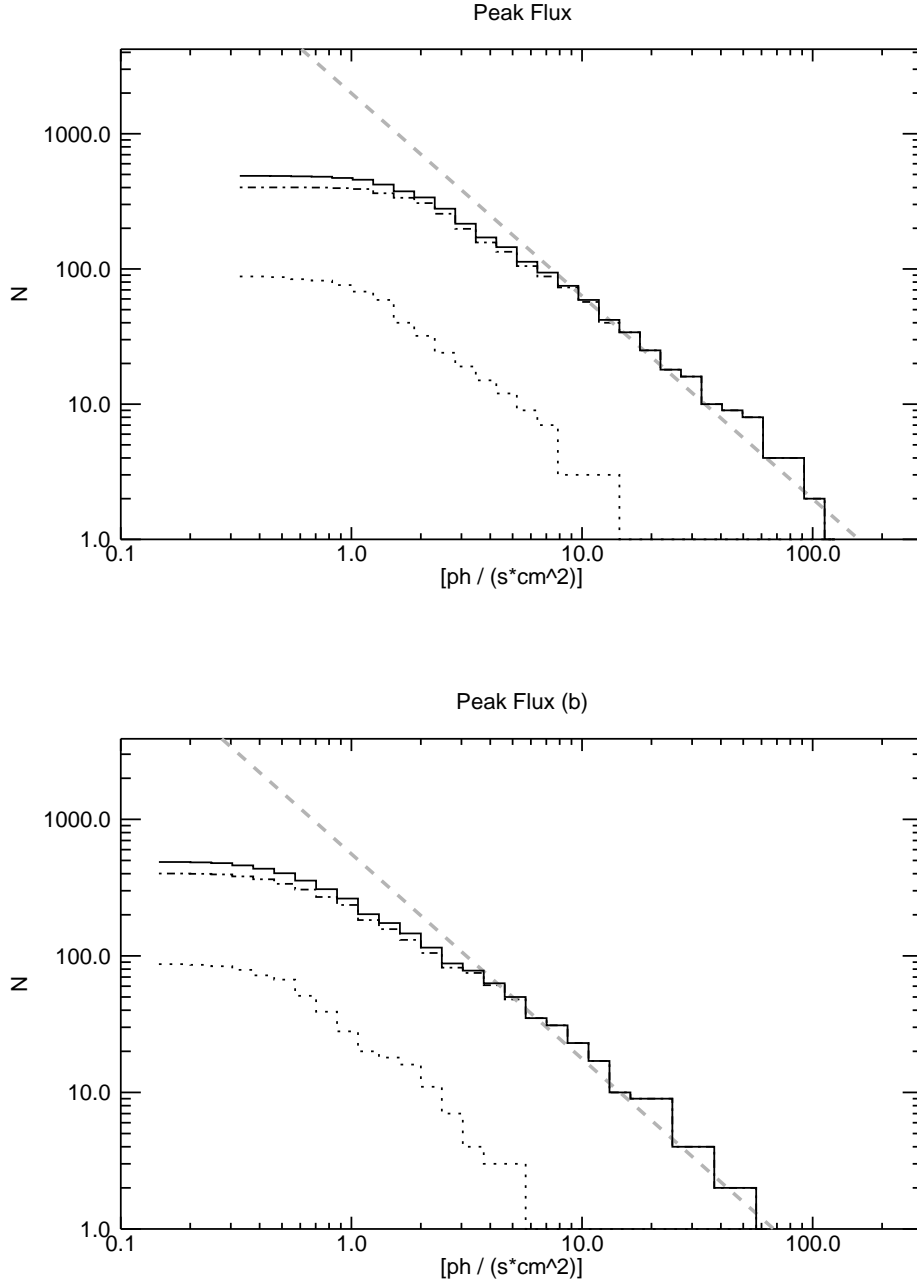


Fig. 4.— Integral distribution of GRB peak flux on the 1.024 s timescale. Energy ranges are 10–1000 keV (upper plot) and 50–300 keV (lower plot). Distributions are shown for the total sample (solid histogram), short GRBs (dots) and long GRBs (dash-dots), using $T_{90} = 2$ s as the distinguishing criterion. In each plot a power law with a slope of $-3/2$ (dashed line) is drawn to guide the eye.

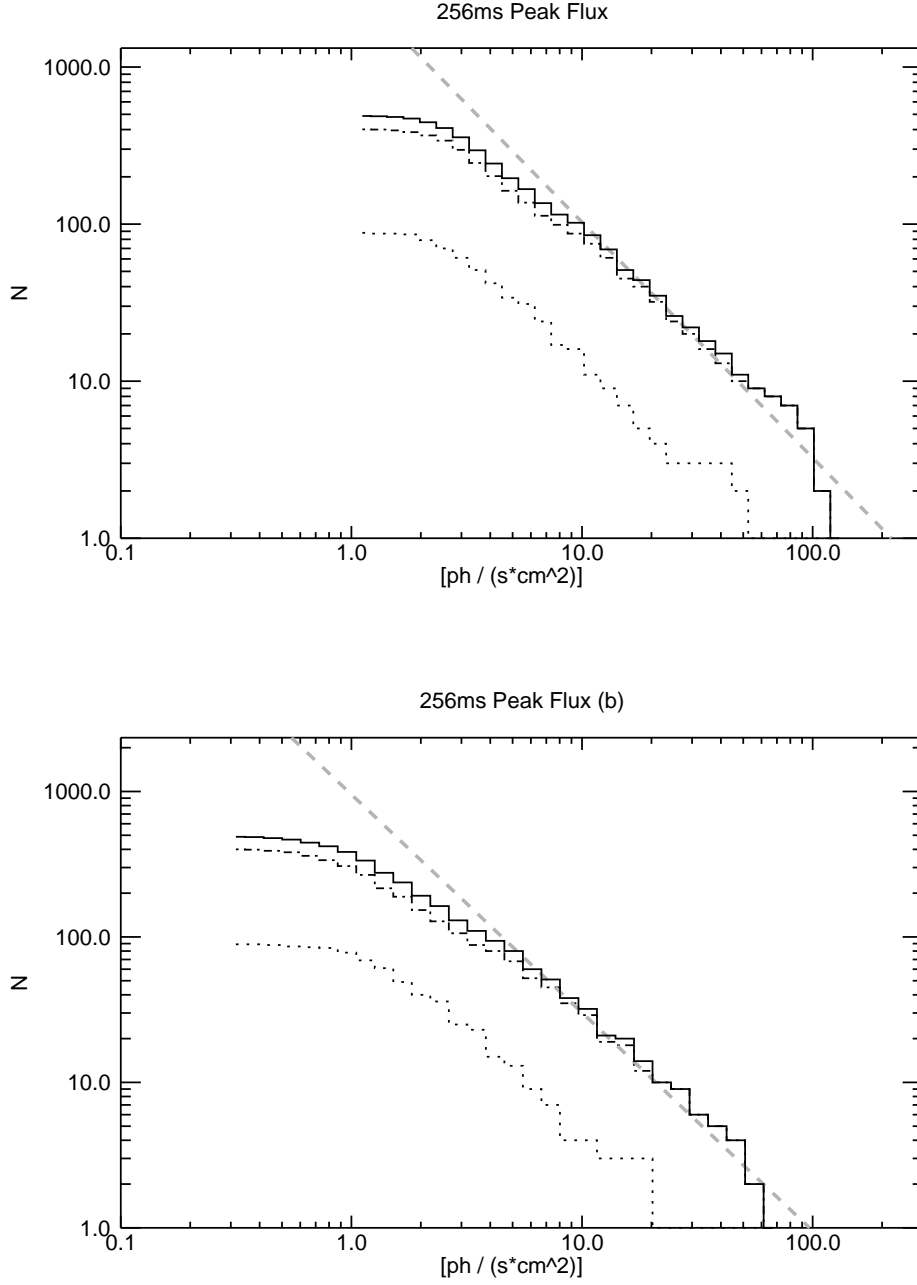


Fig. 5.— Same as Figure 4, except on the 0.256 s timescale.

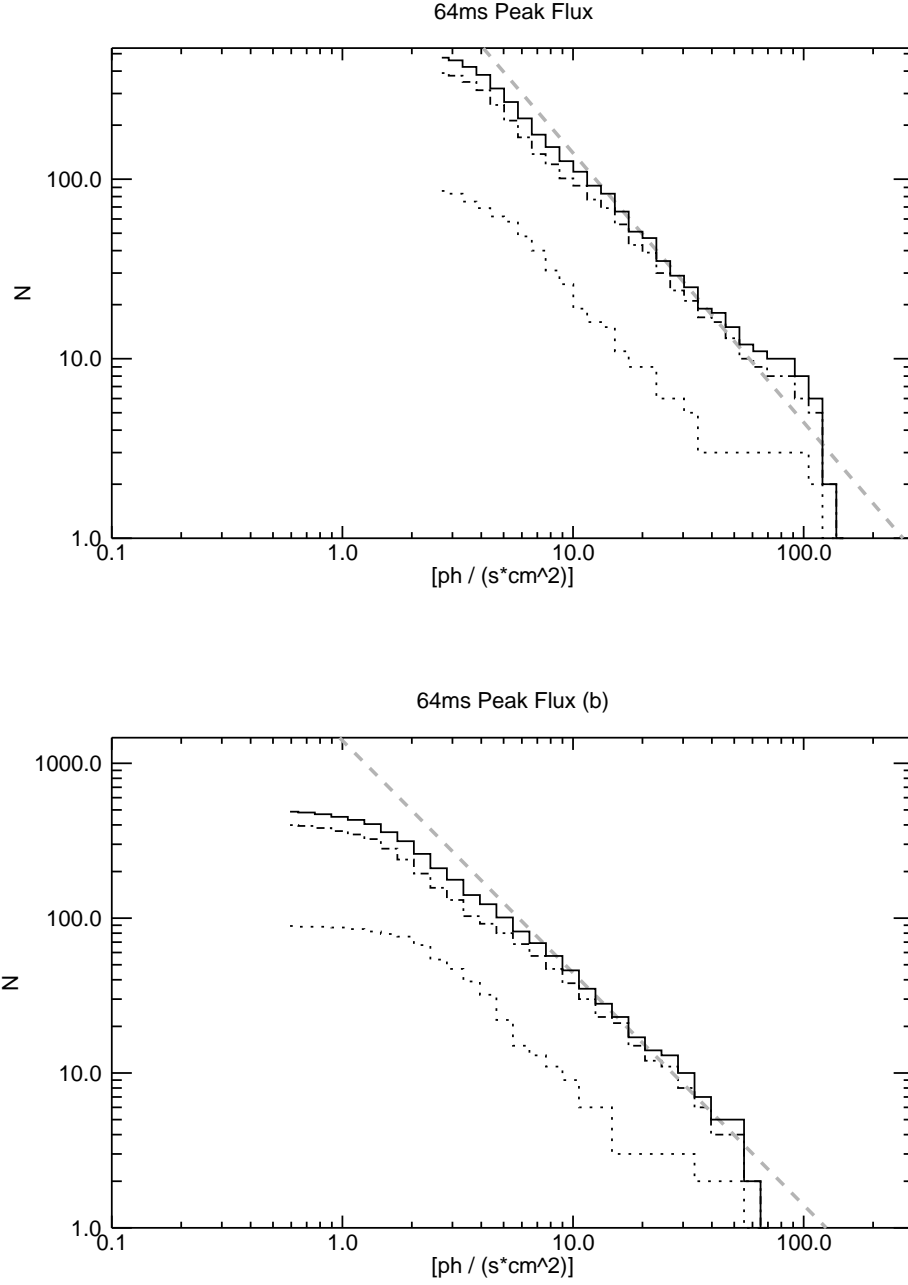


Fig. 6.— Same as Figure 4, except on the 0.064 s timescale.

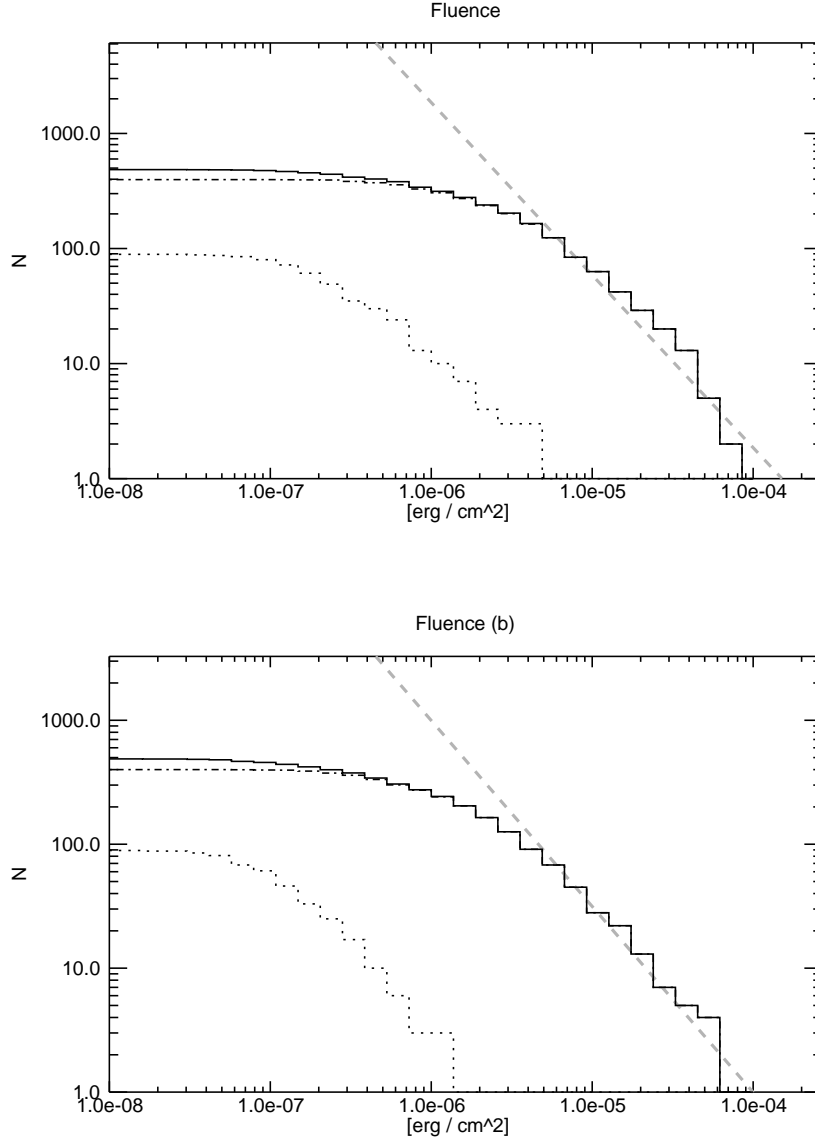


Fig. 7.— Integral distribution of GRB fluence in two energy ranges: 10–1000 keV (upper plot) and 50–300 keV (lower plot). Distributions are shown for the total sample (solid histogram), short GRBs (dots) and long GRBs (dash-dots), using $T_{90} = 2$ s as the distinguishing criterion. In each plot a power law with a slope of $-3/2$ (dashed line) is drawn to guide the eye.

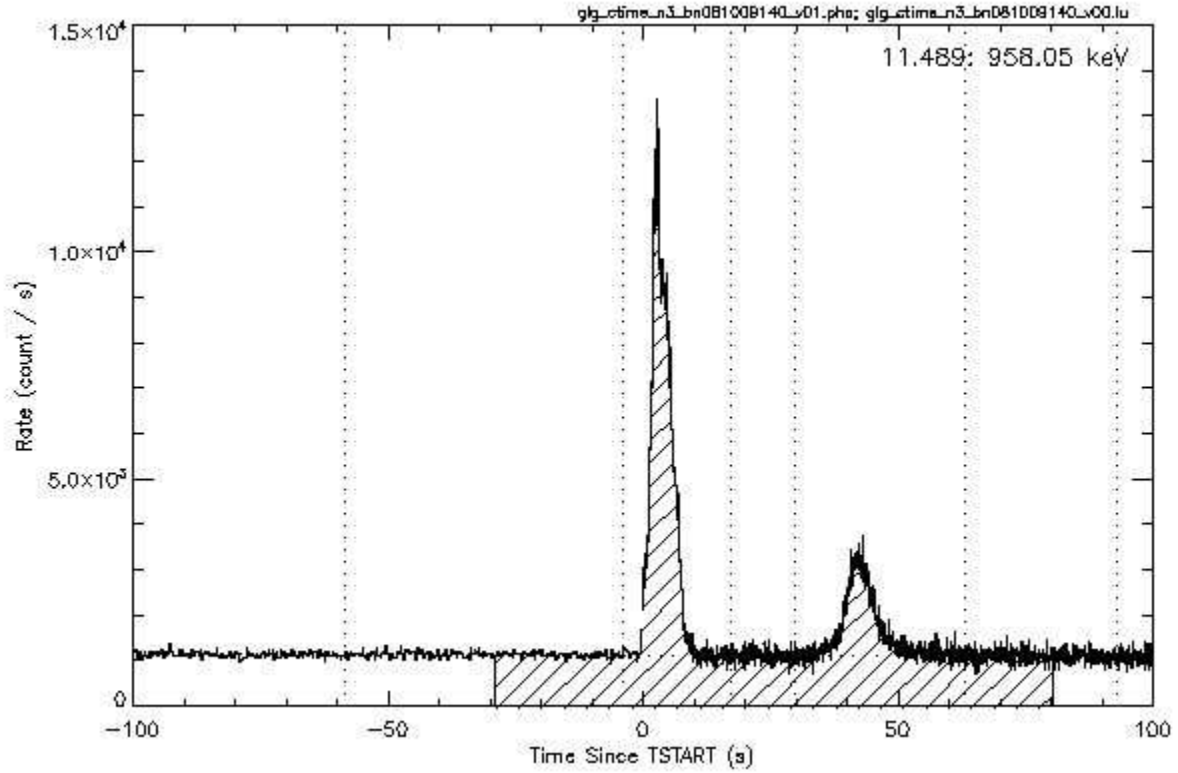


Fig. 8.— CTIME lightcurve of GRB 081009A (bn081009140) in NaI detector 3. Vertical dotted lines indicate the regions selected for fitting the background. Cross-hatching defines the source region selected for the duration analysis. Note that the temporal resolution of CTIME data changes from 0.256 s to 0.064 s at the trigger time.

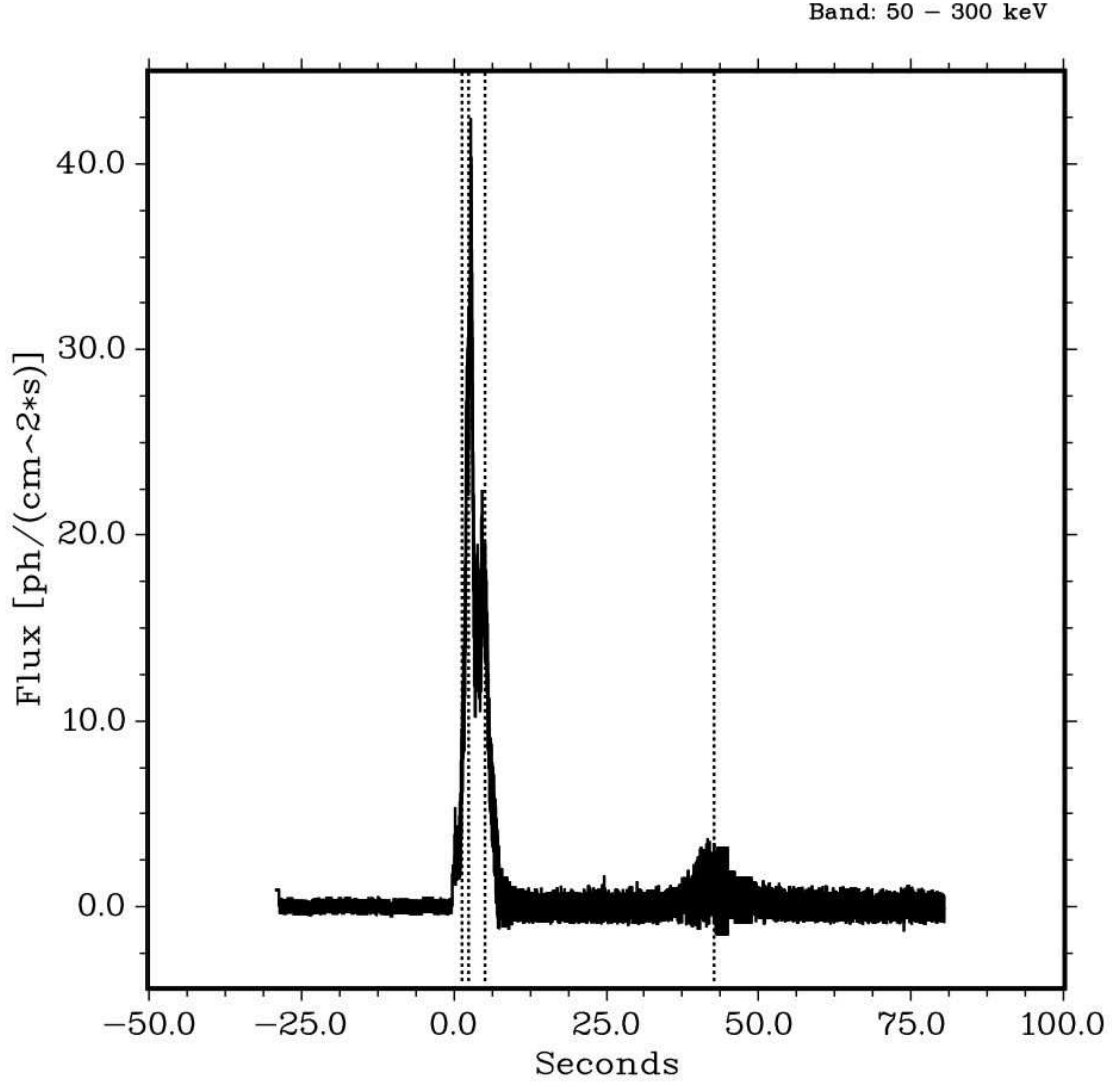


Fig. 9.— Photon flux lightcurve for GRB 081009A (bn081009140) produced by the duration analysis. Data from NaI detectors 3, 4, 7 & 8 were used. Temporal resolution is the same as in the raw CTIME data. Vertical dotted lines are as described in the caption of Figure 10.

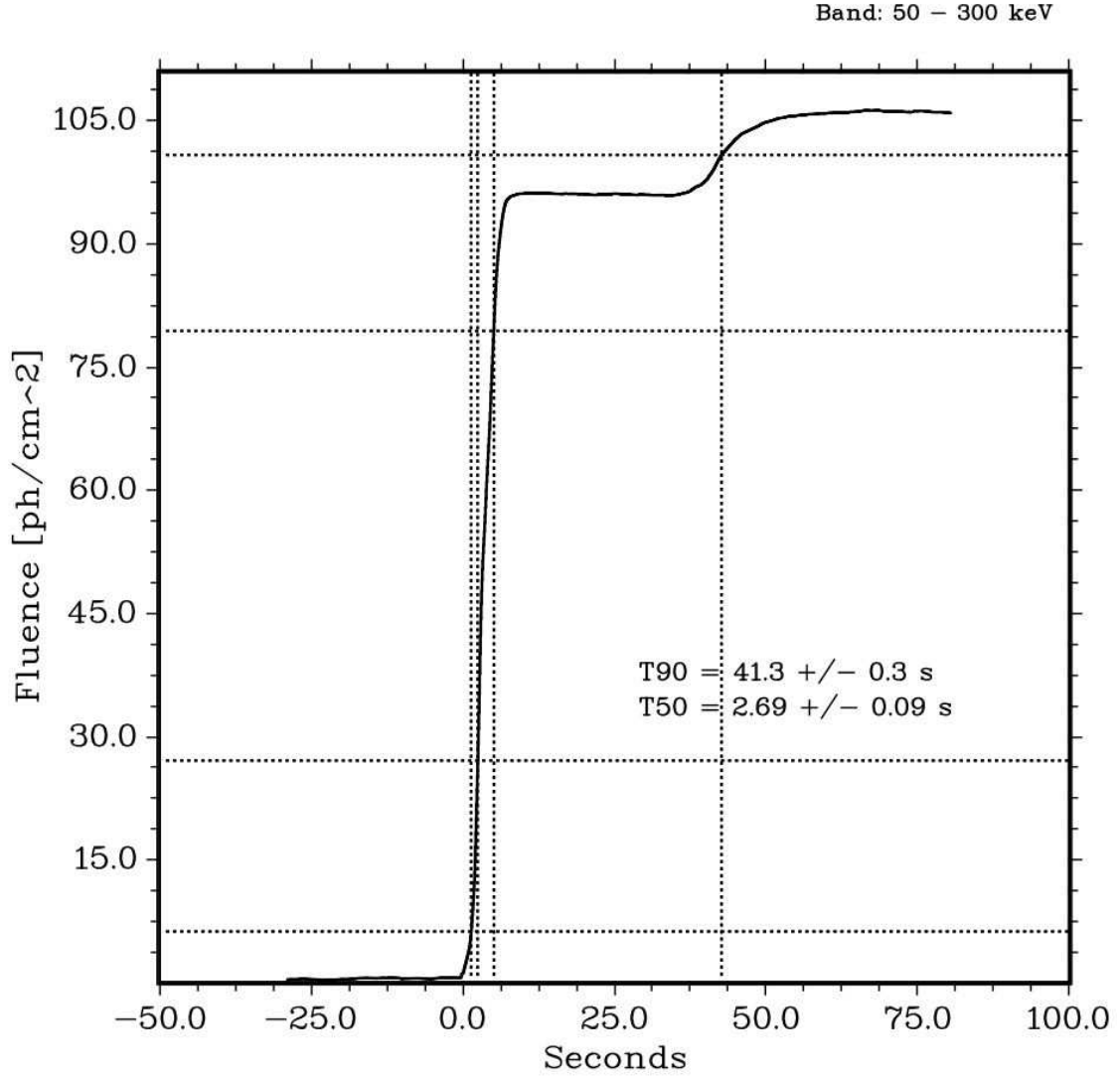


Fig. 10.— The duration plot for GRB 081009A (bn081009140) is an example of the analysis for a bright GRB. Data from NaI detectors 3, 4, 7 & 8 were used. Horizontal dotted lines are drawn at 5%, 25%, 75% and 95% of the total fluence. Vertical dotted lines are drawn at the times corresponding to those same fluences, thereby defining the T_{50} and T_{90} intervals.

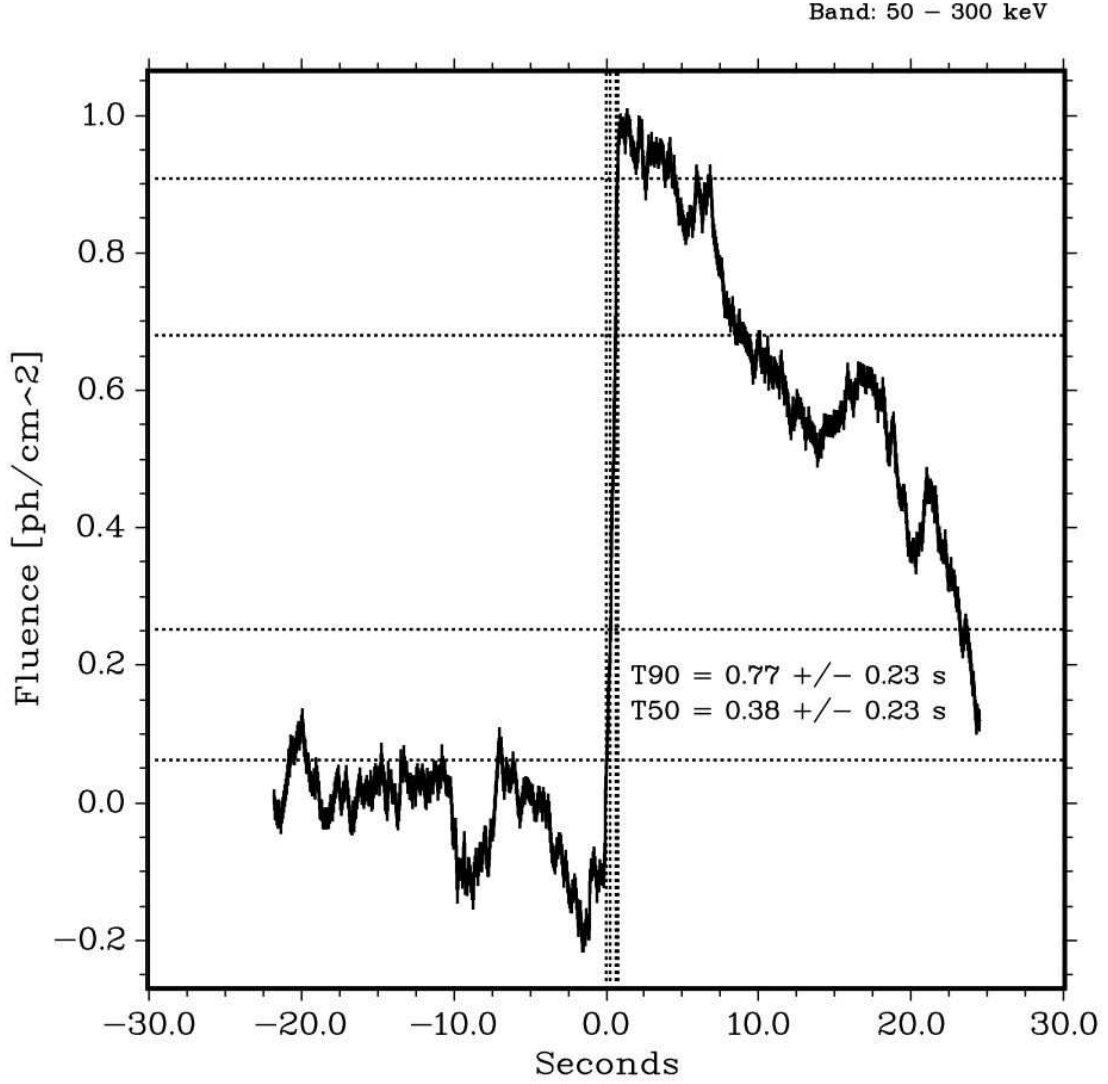


Fig. 11.— The duration plot for GRB 090531B (bn090531775) is an example of the analysis for a weak GRB. Data from NaI detectors 6, 7 & 9 were used. Dotted lines are as described in the caption for Figure 10.

Table 1. Trigger Criteria Hlstory

Algorithm	Timescale	Offset	Channels	Energy	Threshold (0.1σ) ^a				
Number	(ms)	(ms)		(keV)	2008-07-11	2008-07-14	2008-08-01	2009-05-08	2009-07-02
1	16	0	3–4	50–300	75	:	:	:	:
2	32	0	3–4	50–300	75	:	:	:	:
3	32	16	3–4	50–300	75	:	:	:	:
4	64	0	3–4	50–300	45	:	50	:	:
5	64	32	3–4	50–300	45	:	50	:	:
6	128	0	3–4	50–300	45	:	48	50	:
7	128	64	3–4	50–300	45	:	48	50	:
8	256	0	3–4	50–300	45	:	:	:	:
9	256	128	3–4	50–300	45	:	:	:	:
10	512	0	3–4	50–300	45	:	:	:	:
11	512	256	3–4	50–300	45	:	:	:	:
12	1024	0	3–4	50–300	45	:	:	:	:
13	1024	512	3–4	50–300	45	:	:	:	:
14	2048	0	3–4	50–300	45	:	:	:	:
15	2048	1024	3–4	50–300	45	:	:	:	:
16	4096	0	3–4	50–300	45	:	:	:	:
17	4096	2048	3–4	50–300	45	:	:	:	:
18	8192	0	3–4	50–300	C	50	:	:	D
19	8192	4096	3–4	50–300	C	50	:	:	D
20	16384	0	3–4	50–300	C	50	D	:	:
21	16384	8192	3–4	50–300	C	50	D	:	:
22	16	0	2–2	25–50	D	80	:	:	:
23	32	0	2–2	25–50	D	80	:	:	:
24	32	16	2–2	25–50	D	80	:	:	:
25	64	0	2–2	25–50	D	55	:	:	:
26	64	32	2–2	25–50	D	55	:	:	:
27	128	0	2–2	25–50	D	55	:	:	D

Table 1—Continued

Algorithm	Timescale	Offset	Channels	Energy	Threshold (0.1σ) ^a				
					2008-07-11	2008-07-14	2008-08-01	2009-05-08	2009-07-02
28	128	64	2–2	25–50	D	55	:	:	D
29	256	0	2–2	25–50	D	55	:	:	D
30	256	128	2–2	25–50	D	55	:	:	D
31	512	0	2–2	25–50	D	55	:	:	D
32	512	256	2–2	25–50	D	55	:	:	D
33	1024	0	2–2	25–50	D	55	:	:	D
34	1024	512	2–2	25–50	D	55	:	:	D
35	2048	0	2–2	25–50	D	55	:	:	D
36	2048	1024	2–2	25–50	D	55	:	:	D
37	4096	0	2–2	25–50	D	65	:	:	D
38	4096	2048	2–2	25–50	D	65	:	:	D
39	8192	0	2–2	25–50	D	65	:	:	D
40	8192	4096	2–2	25–50	D	65	:	:	D
41	16384	0	2–2	25–50	D	65	D	:	:
42	16384	8192	2–2	25–50	D	65	D	:	:
43	16	0	5–7	> 300	D	80	:	:	:
44	32	0	5–7	> 300	D	80	:	:	D
45	32	16	5–7	> 300	D	80	:	:	D
46	64	0	5–7	> 300	D	55	:	60	D
47	64	32	5–7	> 300	D	55	:	60	D
48	128	0	5–7	> 300	D	55	:	:	D
49	128	64	5–7	> 300	D	55	:	:	D
50	16	0	4–7	> 100	D	80	:	:	:
51	32	0	4–7	> 100	D	80	:	:	D
52	32	16	4–7	> 100	D	80	:	:	D
53	64	0	4–7	> 100	D	55	:	:	D
54	64	32	4–7	> 100	D	55	:	:	D

Table 1—Continued

Algorithm	Timescale	Offset	Channels	Energy	Threshold (0.1σ) ^a				
Number	(ms)	(ms)		(keV)	2008-07-11	2008-07-14	2008-08-01	2009-05-08	2009-07-02
55	128	0	4–7	> 100	D	55	:	:	D
56	128	64	4–7	> 100	D	55	:	:	D
57	256	0	4–7	> 100	D	55	:	:	D
58	256	128	4–7	> 100	D	55	:	:	D
59	512	0	4–7	> 100	D	55	:	:	D
60	512	256	4–7	> 100	D	55	:	:	D
61	1024	0	4–7	> 100	D	55	:	:	D
62	1024	512	4–7	> 100	D	55	:	:	D
63	2048	0	4–7	> 100	D	55	:	:	D
64	2048	1024	4–7	> 100	D	55	:	:	D
65	4096	0	4–7	> 100	D	65	:	:	D
66	4096	2048	4–7	> 100	D	65	:	:	D

^aSymbol ':' indicates no change from previous setting; 'C' indicates that the algorithm is in compute mode (see text); 'D' indicates that the algorithm is disabled.

Table 2. GRB Triggers: Locations and Trigger Characteristics

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn080714086	GRB 080714B	02:04:12.0534	41.9	8.5	7.5	Fermi-GBM	10	512	47–291	IA
bn080714425	GRB 080714C	10:12:01.8376	187.5	-74	8.7	Fermi-GBM	17	4096	47–291	IA
bn080714745	GRB 080714A	17:52:54.0234	188.1	-60.2	0	Swift	13	1024	47–291	S, K, IA, R
<i>bn080715950</i>	<i>GRB 080715A</i>	22:48:40.1634	214.7	9.9	2	Fermi-GBM	29	256	23–47	K
bn080717543	GRB 080717A	13:02:35.2207	147.3	-70	4.7	Fermi-GBM	17	4096	47–291	IA
bn080719529	GRB 080719A	12:41:40.9578	153.2	-61.3	13.8	Fermi-GBM	16	4096	47–291	IA
bn080720316	GRB 080720A	07:35:35.5476	98.5	-43.9	4.8	Fermi-GBM	19	8192	47–291	
<i>bn080723557</i>	<i>GRB 080723B</i>	13:22:21.3751	176.8	-60.2	0	Swift	8	256	47–291	IB, IA, K, SA, AM
bn080723913	GRB 080723C	21:55:23.0583	113.3	-19.7	9.9	Fermi-GBM	5	64	47–291	W
bn080723985	GRB 080723D	23:37:42.7083	105.3	71.1	1	Fermi-GBM	11	512	47–291	K, W*, IA
bn080724401	GRB 080724A	09:37:40.6034	358.3	32.9	1.6	Fermi-GBM	9	256	47–291	K, W
bn080725435	GRB 080725A	10:26:09.0559	121.7	-14	0	Swift	4	64	47–291	S, IA
bn080725541	GRB 080725B	12:59:23.7624	354.8	8.9	3.5	Fermi-GBM	4	64	47–291	IA, W*
bn080727964	GRB 080727C	23:07:46.2169	32.6	64.1	0	Swift	15	2048	47–291	S, W
bn080730520	GRB 080730A	12:29:15.4032	245.4	4.6	2.1	Fermi-GBM	17	4096	47–291	W*
<i>bn080730786</i>	<i>GRB 080730B</i>	18:51:38.1813	246.6	28.7	2.1	Fermi-GBM	4	64	47–291	K, W, R, AM
<i>bn080802386</i>	<i>GRB 080802A</i>	09:15:10.5274	154.3	40.7	4.1	Fermi-GBM	5	64	47–291	IA, W, K
bn080803772	GRB 080803A	18:31:22.0407	300.1	82.8	5.9	Fermi-GBM	14	2048	47–291	IA, W, AM
bn080804456	GRB 080804B	10:56:07.1590	107.5	20.3	7.3	Fermi-GBM	17	4096	47–291	
bn080804972	GRB 080804A	23:20:14.8794	328.7	-53.2	0	Swift	10	512	47–291	S, IA, R
bn080805496	GRB 080805B	11:53:50.5646	322.7	47.9	5.6	Fermi-GBM	17	4096	47–291	
bn080805584	GRB 080805C	14:01:06.2435	174.5	-23.1	5.7	Fermi-GBM	15	2048	47–291	
bn080806584	GRB 080806A	14:01:11.2038	94.6	57.8	13.6	Fermi-GBM	11	512	47–291	
bn080806896	GRB 080806B	21:29:40.8238	241.8	46.7	2.9	Fermi-GBM	39	8192	23–47	K, W
<i>bn080807993</i>	<i>GRB 080807A</i>	23:50:32.6389	101.7	-16	2.6	Fermi-GBM	1	16	47–291	IA, K
bn080808451	GRB 080808A	10:50:03.2649	107.4	-33.8	13.6	Fermi-GBM	16	4096	47–291	
bn080808565	GRB 080808B	13:33:48.3383	33.6	5.4	2.6	Fermi-GBM	12	1024	47–291	
bn080808772	GRB 080808C	18:31:39.7362	96.7	-14.4	12.3	Fermi-GBM	17	4096	47–291	
bn080809808	GRB 080809A	19:23:33.1292	91.7	61.4	7.1	Fermi-GBM	16	4096	47–291	
bn080810549	GRB 080810A	13:10:12.5806	356.8	0.3	0	Swift	9	256	47–291	S, IA, K*

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn080812889	GRB 080812A	21:19:33.8316	176.7	-33.2	4.1	Fermi-GBM	15	2048	47–291	W*
bn080815917	GRB 080815A	22:00:05.0847	240.9	-47.8	6.3	Fermi-GBM	7	128	47–291	
bn080816503	GRB 080816A	12:04:18.1800	156.2	42.6	2	Fermi-GBM	13	1024	47–291	K
<i>bn080816989</i>	<i>GRB 080816B</i>	23:43:54.6901	289.5	-6.8	5.3	Fermi-GBM	4	64	47–291	K, W, IA
<i>bn080817161</i>	<i>GRB 080817A</i>	03:52:10.5370	148.9	-16.3	1	Fermi-GBM	10	512	47–291	K, W, IA
bn080817720	GRB 080817B	17:17:07.5186	80.2	-17.1	5.7	Fermi-GBM	5	64	47–291	W
bn080818579	GRB 080818A	13:54:24.8403	60.4	-6.9	6.5	Fermi-GBM	9	256	47–291	IA
bn080818945	GRB 080818B	22:40:49.0790	98.1	7.4	7.3	Fermi-GBM	11	512	47–291	W*
bn080821332	GRB 080821A	07:57:26.4787	238.6	32.6	3.6	Fermi-GBM	11	512	47–291	K, IA, R
bn080823363	GRB 080823A	08:42:13.1426	89.8	-42.4	3.3	Fermi-GBM	16	4096	47–291	W, IA
bn080824909	GRB 080824A	21:48:54.7277	122.4	-2.8	1	Fermi-GBM	6	128	47–291	K, IA
<i>bn080825593</i>	<i>GRB 080825C</i>	14:13:48.1048	234	-4.7	1.5	Fermi-LAT	9	256	47–291	IA, L, K
bn080828189	GRB 080828B	04:32:11.2646	221.3	-12.3	16.9	Fermi-GBM	8	256	47–291	
bn080829790	GRB 080829A	18:57:36.4204	221.9	3.2	4.3	Fermi-GBM	8	256	47–291	
bn080830368	GRB 080830A	08:50:16.3345	160.1	30.8	2.5	Fermi-GBM	10	512	47–291	IA, K
bn080831053	GRB 080831A	01:16:14.7521	211.2	-51.7	11.5	Fermi-GBM	3	32	47–291	
bn080831921	GRB 080831B	22:06:23.1654	259.1	-23.2	2.8	Fermi-GBM	8	256	47–291	
bn080904886	GRB 080904A	21:16:04.7512	214.2	-30.3	2.1	Fermi-GBM	37	4096	23–47	
<i>bn080905499</i>	<i>GRB 080905A</i>	11:58:55.0382	287.7	-18.9	0	Swift	2	32	47–291	S, IA, W
bn080905570	GRB 080905C	13:41:29.3763	96.9	-69.8	8	Fermi-GBM	12	1024	47–291	W*
bn080905705	GRB 080905B	16:55:46.8427	301.7	-62.6	0	Swift	12	1024	47–291	S, IA
bn080906212	GRB 080906B	05:05:11.5468	182.8	-6.4	1.3	Fermi-GBM	9	256	47–291	IA, K, W
bn080912360	GRB 080912A	08:38:55.9394	25.8	-7.2	7.1	Fermi-GBM	15	2048	47–291	W*
bn080913735	GRB 080913B	17:38:31.4195	45.1	-3	5.9	Fermi-GBM	8	256	47–291	
<i>bn080916009</i>	<i>GRB 080916C</i>	00:12:45.6135	119.8	-56.6	0	Swift	16	4096	47–291	IA, L, K, R
bn080916406	GRB 080916A	09:45:18.9384	336.3	-57	0	Swift	14	2048	47–291	S, K, W, IA
bn080919790	GRB 080919B	18:57:35.1052	219.5	44.4	18.1	Fermi-GBM	1	16	47–291	
bn080920268	GRB 080920A	06:25:48.8588	121.6	8.9	5.4	Fermi-GBM	17	4096	47–291	
bn080924766	GRB 080924A	18:22:36.8437	72.8	32.5	4.4	Fermi-GBM	13	1024	47–291	
<i>bn080925775</i>	<i>GRB 080925A</i>	18:35:55.9969	96.1	18.2	1.2	Fermi-GBM	8	256	47–291	K, W, R

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn080927480	GRB 080927A	11:30:32.1064	61.3	27.4	4.6	Fermi-GBM	13	1024	47–291	W*
bn080928628	GRB 080928A	15:04:56.0478	95.1	-55.2	0	Swift	9	256	47–291	S
bn081003644	GRB 081003C	15:27:17.9319	259.1	35.4	6.9	Fermi-GBM	14	2048	47–291	IA, W
bn081006604	GRB 081006A	14:29:34.1726	142	-67.4	8	Fermi-GBM	6	128	47–291	IA, W
bn081006872	GRB 081006B	20:55:35.5945	172.2	-61	8.7	Fermi-GBM	10	512	47–291	IA
bn081008832	GRB 081008A	19:58:01.7992	280	-57.4	0	Swift	12	1024	47–291	S, IA
bn081009140	GRB 081009A	03:20:58.0628	250.5	18.4	1	Fermi-GBM	8	256	47–291	K, IA, R
<i>bn081009690</i>	<i>GRB 081009B</i>	16:33:37.3376	64.6	14.2	2.1	Fermi-GBM	9	256	47–291	W*
<i>bn081012045</i>	<i>GRB 081012B</i>	01:05:22.7830	69.7	4.5	5.4	Fermi-GBM	7	128	47–291	IA
bn081012549	GRB 081012A	13:10:23.0326	30.2	-17.6	0	Swift	12	1024	47–291	S, IA
bn081017474	GRB 081017B	11:22:37.4396	109	-15.2	8	Fermi-GBM	13	1024	47–291	
bn081021398	GRB 081021A	09:33:28.0154	190.3	-25.6	4.1	Fermi-GBM	10	512	47–291	
bn081022364	GRB 081022A	08:44:44.8470	205.4	16.6	7.9	Fermi-GBM	8	256	47–291	W
bn081024245	GRB 081024A	05:53:09.0057	27.9	61.3	0	Swift	4	64	47–291	S, IA
bn081024851	GRB 081024C	20:25:34.1230	145.8	-10.8	4.5	Fermi-GBM	14	2048	47–291	
bn081024891	GRB 081024B	21:22:40.8642	322.9	21.2	0	Fermi-LAT	4	64	47–291	L, IA, W
bn081025349	GRB 081025A	08:23:05.2927	245.4	60.5	0	Swift	10	512	47–291	S, K, IA, W, R
bn081028538	GRB 081028B	12:55:08.1805	16	-27.2	6.9	Fermi-GBM	8	256	47–291	
bn081101167	GRB 081101C	04:00:39.6334	213.3	-18.5	8.1	Fermi-GBM	18	8192	47–291	
bn081101491	GRB 081101A	11:46:32.0578	95.8	-0.1	0	Swift	4	64	47–291	S
<i>bn081101532</i>	<i>GRB 081101B</i>	12:45:24.0820	207.5	-28	1.1	Fermi-GBM	10	512	47–291	K, IA
bn081102365	GRB 081102B	08:45:00.5059	225.3	22	8.6	Fermi-GBM	4	64	47–291	IA, W
bn081102739	GRB 081102A	17:44:21.5994	331.2	53	0	Swift	12	1024	47–291	S
bn081105614	GRB 081105B	14:43:51.2874	215.8	38.7	11.4	Fermi-GBM	5	64	47–291	IA
bn081107321	GRB 081107A	07:42:01.1148	51	17.1	3.5	Fermi-GBM	7	128	47–291	
bn081109293	GRB 081109A	07:02:02.4154	330.8	-54.7	0	Swift	17	4096	47–291	S
<i>bn081110601</i>	<i>GRB 081110A</i>	14:25:43.0316	111.7	21.4	1.8	Fermi-GBM	56	128	> 98	IA, K
bn081113230	GRB 081113A	05:31:32.8973	170.3	56.3	12.4	Fermi-GBM	26	64	23–47	IA
bn081115891	GRB 081115A	21:22:28.1472	190.6	63.3	15.1	Fermi-GBM	8	256	47–291	
bn081118876	GRB 081118B	21:00:53.5356	54	-50.4	2.9	Fermi-GBM	13	1024	47–291	R

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn081119184	GRB 081119A	04:25:27.0590	346.5	30	15.2	Fermi-GBM	10	512	47–291	
bn081120618	GRB 081120A	14:49:34.5666	205.4	-9.1	6	Fermi-GBM	15	2048	47–291	
bn081121858	GRB 081121A	20:35:27.7540	89.3	-60.6	0	Swift	14	2048	47–291	S, K, IA
<i>bn081122520</i>	<i>GRB 081122A</i>	12:28:12.2113	339.1	40	1	Fermi-GBM	6	128	47–291	K, W, IA, R
bn081122614	GRB 081122B	14:43:26.2316	151.4	-2.1	11.2	Fermi-GBM	1	16	47–291	IA
bn081124060	GRB 081124A	01:26:10.8478	340.1	-14.6	2.5	Fermi-GBM	34	1024	23–47	IA
<i>bn081125496</i>	<i>GRB 081125A</i>	11:53:39.0035	42.7	-18.9	1	Fermi-GBM	9	256	47–291	IA, K, W*
<i>bn081126899</i>	<i>GRB 081126A</i>	21:34:09.0649	323.5	48.7	0	Swift	9	256	47–291	S, K, IA
<i>bn081129161</i>	<i>GRB 081129A</i>	03:52:04.2604	63.2	-54.9	3	Fermi-GBM	9	256	47–291	IA, K, R
bn081130212	GRB 081130A	05:04:40.7189	34.2	45.4	7.2	Fermi-GBM	26	64	23–47	
bn081130629	GRB 081130B	15:05:15.7221	13.2	-5.5	3.8	Fermi-GBM	11	512	47–291	
bn081204004	GRB 081204C	00:05:24.2438	63.3	-62.6	4.8	Fermi-GBM	11	512	47–291	
bn081204517	GRB 081204B	12:24:25.7930	150.8	30.5	10.2	Fermi-GBM	1	16	47–291	IA
bn081206275	GRB 081206A	06:35:53.0181	120.1	32.8	6.4	Fermi-GBM	17	4096	47–291	IA, W*
bn081206604	GRB 081206B	14:29:30.6929	353.3	-31.9	12.6	Fermi-GBM	14	2048	47–291	
bn081206987	GRB 081206C	23:41:50.4689	54.3	-8.6	11.2	Fermi-GBM	15	2048	47–291	IA, W*
<i>bn081207680</i>	<i>GRB 081207A</i>	16:18:46.9364	112.4	70.5	1.2	Fermi-GBM	12	1024	47–291	IA, W*, R
<i>bn081209981</i>	<i>GRB 081209A</i>	23:31:56.3889	45.3	63.5	4.9	Fermi-GBM	1	16	47–291	K
bn081213173	GRB 081213A	04:09:41.6360	12.9	-33.9	13.2	Fermi-GBM	3	32	47–291	IA*
<i>bn081215784</i>	<i>GRB 081215A</i>	18:48:36.8462	125.6	54	1	IPN	11	512	47–291	IA*, K, R, L
bn081215880	GRB 081215B	21:06:53.0399	228.6	-50.7	5.4	Fermi-GBM	8	256	47–291	W
<i>bn081216531</i>	<i>GRB 081216A</i>	12:43:59.9939	129.2	7.6	4.4	Fermi-GBM	6	128	47–291	IA, W, K, R
bn081217983	GRB 081217A	23:34:49.0146	116.8	26.8	2	Fermi-GBM	14	2048	47–291	IA, R
bn081221681	GRB 081221A	16:21:12.2182	15.8	-24.5	0	Swift	8	256	47–291	S, K
bn081222204	GRB 081222A	04:54:00.2557	22.7	-34.1	0	Swift	8	256	47–291	S, K, IA, R
bn081223419	GRB 081223A	10:03:57.1476	112.5	33.2	3.8	Fermi-GBM	2	32	47–291	IA
<i>bn081224887</i>	<i>GRB 081224A</i>	21:17:55.4139	201.7	75.1	1	Fermi-GBM	5	64	47–291	K, W, IA*
bn081225257	GRB 081225A	06:09:21.3432	234.1	-64.6	6.9	Fermi-GBM	17	4096	47–291	
bn081226044	GRB 081226A	01:03:37.5263	120.5	-69	0	Swift	7	128	47–291	S, IA
bn081226156	GRB 081226C	03:44:52.4146	193	26.8	2.4	Fermi-GBM	34	1024	23–47	

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn081226509	GRB 081226B	12:13:10.7055	25.5	-47.4	0	Integral	4	64	47–291	IB, IA*
bn081229187	GRB 081229A	04:29:01.8801	172.6	56.9	8.8	Fermi-GBM	5	64	47–291	IA*
bn081229675	GRB 081229B	16:12:17.3756	310	22.8	20.7	Fermi-GBM	1	16	47–291	
bn081230871	GRB 081230B	20:53:40.9367	207.6	-17.3	7.7	Fermi-GBM	7	128	47–291	
bn081231140	GRB 081231A	03:21:01.9340	208.6	-35.8	1	Fermi-GBM	10	512	47–291	K, IA
bn090101758	GRB 090101A	18:11:41.9175	77.8	-31.6	1.2	Fermi-GBM	13	1024	47–291	
<i>bn090102122</i>	<i>GRB 090102A</i>	02:55:30.8461	128.2	33.1	0	Swift	8	256	47–291	S, K, IA*
bn090107681	GRB 090107B	16:20:42.7655	284.8	59.6	0	Integral	14	2048	47–291	IB, W*
bn090108020	GRB 090108A	00:29:02.3655	260.8	46	3.8	Fermi-GBM	1	16	47–291	K, W
bn090108322	GRB 090108B	07:43:23.3598	0.4	-32.9	8.3	Fermi-GBM	3	32	47–291	
bn090109332	GRB 090109A	07:58:29.4926	129.6	51.8	9.8	Fermi-GBM	8	256	47–291	
bn090112332	GRB 090112A	07:57:23.1109	110.9	-30.4	1	Fermi-GBM	10	512	47–291	IA, W*
bn090112729	GRB 090112B	17:30:15.4538	192.3	25.4	1.7	Fermi-GBM	13	1024	47–291	K, W, IA*, R
bn090113778	GRB 090113A	18:40:40.8419	32.1	33.4	0	Swift	10	512	47–291	S, W*
bn090117335	GRB 090117B	08:02:02.2267	227.3	-41.5	4.8	Fermi-GBM	10	512	47–291	
bn090117632	GRB 090117C	15:10:40.1758	121.6	-38.8	1.9	Fermi-GBM	17	4096	47–291	W, IA*
bn090117640	GRB 090117A	15:22:01.0547	164	-58.2	0	AGILE	9	256	47–291	SA, IA*
bn090120627	GRB 090120A	15:02:22.7594	38.1	-72.2	11.2	Fermi-GBM	11	512	47–291	W
bn090126227	GRB 090126B	05:26:22.2341	189.2	34.1	3.6	Fermi-GBM	34	1024	23–47	
bn090126245	GRB 090126C	05:52:33.7347	224.9	41.2	11.1	Fermi-GBM	8	256	47–291	W
bn090129880	GRB 090129A	21:07:15.4256	269	-32.8	0	Swift	8	256	47–291	S, IA*
bn090131090	GRB 090131A	02:09:21.1491	352.3	21.2	1	Fermi-GBM	8	256	47–291	K, W, IA*, R
bn090202347	GRB 090202A	08:19:30.4005	274.3	-2	2.6	Fermi-GBM	13	1024	47–291	IA
bn090206620	GRB 090206A	14:52:42.1707	156.2	8.8	8.7	Fermi-GBM	1	16	47–291	IA, W, R
bn090207777	GRB 090207A	18:39:10.8373	252.7	34.9	3.8	Fermi-GBM	12	1024	47–291	W, IA*, R
bn090213236	GRB 090213A	05:39:25.4589	330.6	-55	3.1	Fermi-GBM	16	4096	47–291	
<i>bn090217206</i>	<i>GRB 090217A</i>	04:56:42.5578	204.9	-8.4	0	Fermi-LAT	9	256	47–291	IA, L, K, W, R
<i>bn090219074</i>	<i>GRB 090219A</i>	01:46:18.1486	26.5	59.2	5.2	Fermi-GBM	5	64	47–291	IA*, R
bn090222179	GRB 090222A	04:17:09.5761	118.6	45	4.3	Fermi-GBM	10	512	47–291	
bn090225009	GRB 090225A	00:12:23.9776	358.2	61	8.7	Fermi-GBM	8	256	47–291	

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
<i>bn090227310</i>	<i>GRB 090227A</i>	07:25:57.0031	3.3	-43	1.2	Fermi-GBM	9	256	47–291	IA, K-RF, W, R
<i>bn090227772</i>	<i>GRB 090227B</i>	18:31:01.4069	11.8	32.2	1.8	Fermi-GBM	1	16	47–291	IA, K, W
<i>bn090228204</i>	<i>GRB 090228A</i>	04:53:20.9115	106.8	-24.3	1	Integral	1	16	47–291	K, R
bn090228976	GRB 090228B	23:25:01.0232	357.6	36.7	3.3	Fermi-GBM	9	256	47–291	W
bn090301315	GRB 090301B	07:33:37.9783	352.8	9.5	5	Fermi-GBM	13	1024	47–291	IA*, W*
bn090304216	GRB 090304A	05:10:48.1569	195.9	-73.4	12.3	Fermi-GBM	8	256	47–291	IA
<i>bn090305052</i>	<i>GRB 090305B</i>	01:14:35.7277	135	74.3	5.4	Fermi-GBM	5	64	47–291	K, IA
bn090306245	GRB 090306C	05:52:05.3453	137	57	4.1	Fermi-GBM	14	2048	47–291	
bn090307167	GRB 090307B	03:59:57.2490	172.7	-23.9	12.4	Fermi-GBM	17	4096	47–291	
<i>bn090308734</i>	<i>GRB 090308B</i>	17:36:24.6992	21.9	-54.3	4.8	Fermi-GBM	7	128	47–291	IA, K, R
bn090309767	GRB 090309B	18:25:07.1934	174.3	-49.5	3.6	Fermi-GBM	12	1024	47–291	IA*
bn090310189	GRB 090310A	04:32:49.9023	184.9	-34.2	4.7	Fermi-GBM	9	256	47–291	IA*
bn090316311	GRB 090316A	07:27:42.4470	256.1	-38.9	9.3	Fermi-GBM	4	64	47–291	
bn090319622	GRB 090319A	14:55:35.2224	283.3	-8.9	2.6	Fermi-GBM	17	4096	47–291	IA*
bn090320045	GRB 090320C	01:05:10.5272	108.3	-43.3	17.9	Fermi-GBM	14	2048	47–291	
bn090320418	GRB 090320A	10:01:46.0112	238	-46.5	12	Fermi-GBM	12	1024	47–291	
bn090320801	GRB 090320B	19:13:46.0964	183.4	49.8	9.5	Fermi-GBM	11	512	47–291	IA*
<i>bn090323002</i>	<i>GRB 090323A</i>	00:02:42.6274	190.7	17.1	0	Swift	14	2048	47–291	L, IA, K
bn090326633	GRB 090326A	15:10:49.4848	259.7	-7.4	4	Fermi-GBM	15	2048	47–291	
bn090327404	GRB 090327A	09:41:41.5202	33.1	-41.5	3.1	Fermi-GBM	12	1024	47–291	
<i>bn090328401</i>	<i>GRB 090328A</i>	09:36:46.5113	90.9	-42	0	Swift	14	2048	47–291	L, K, IA*, R
<i>bn090328713</i>	<i>GRB 090328B</i>	17:07:04.9370	155.7	33.4	7.9	Fermi-GBM	1	16	47–291	K, IA*, W, AM
bn090330279	GRB 090330A	06:42:22.0973	160.2	-8.2	2.1	Fermi-GBM	14	2048	47–291	R
<i>bn090331681</i>	<i>GRB 090331A</i>	16:20:20.3852	210.5	3.1	9.3	Fermi-GBM	5	64	47–291	IA
bn090403314	GRB 090403A	07:32:42.1295	67.1	47.2	9.7	Fermi-GBM	12	1024	47–291	
bn090405663	GRB 090405A	15:54:41.3408	221.9	-9.2	10.4	Fermi-GBM	5	64	47–291	
bn090409288	GRB 090409A	06:54:01.4423	302.1	1.1	9.6	Fermi-GBM	17	4096	47–291	IA*
bn090411838	GRB 090411A	20:06:36.8889	156	-68.9	2.4	Fermi-GBM	6	128	47–291	IA, K, W, R
bn090411991	GRB 090411B	23:47:44.8754	38.5	5.1	2.4	Fermi-GBM	10	512	47–291	K, W
bn090412061	GRB 090412A	01:28:05.2531	1.3	-51.9	10.6	Fermi-GBM	7	128	47–291	IA*

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn090413122	GRB 090413A	02:55:57.2416	266.5	-9.2	5.5	Fermi-GBM	8	256	47–291	
bn090418816	GRB 090418C	19:35:24.9183	262.8	-28.2	14.4	Fermi-GBM	7	128	47–291	IA, W*
bn090419997	GRB 090419B	23:55:05.0509	88.6	31.3	3.6	Fermi-GBM	15	2048	47–291	W*
bn090422150	GRB 090422A	03:35:17.0668	294.7	40.4	0	Swift	10	512	47–291	S
bn090423330	GRB 090423A	07:55:25.3942	148.7	18.1	0	Swift	16	4096	47–291	S
<i>bn090424592</i>	<i>GRB 090424A</i>	14:12:08.6651	189.5	16.8	0	Swift	6	128	47–291	S, W, IA, R
bn090425377	GRB 090425A	09:03:30.5674	118.6	68.1	2.1	Fermi-GBM	7	128	47–291	IA, K, W
bn090426066	GRB 090426B	01:35:35.2251	17.6	-19.2	18.1	Fermi-GBM	14	2048	47–291	
bn090426690	GRB 090426C	16:33:33.2023	82.7	-9.7	2	Fermi-GBM	9	256	47–291	K
bn090427644	GRB 090427B	15:27:00.8558	210	-45.7	11.8	Fermi-GBM	14	2048	47–291	
bn090427688	GRB 090427C	16:30:23.8089	356.2	-34.6	5.8	Fermi-GBM	12	1024	47–291	W*
bn090428441	GRB 090428A	10:34:38.4630	210.1	39.5	4.2	Fermi-GBM	7	128	47–291	
bn090428552	GRB 090428B	13:15:11.0554	0.8	11.5	3.9	Fermi-GBM	36	2048	23–47	W
bn090429530	GRB 090429C	12:43:25.6998	260	54.3	4.8	Fermi-GBM	13	1024	47–291	IA*
<i>bn090429753</i>	<i>GRB 090429D</i>	18:03:57.5120	125.2	6.2	4.6	Fermi-GBM	4	64	47–291	IA*, K
bn090502777	GRB 090502A	18:39:34.6476	267.8	-20.3	7.4	Fermi-GBM	9	256	47–291	
bn090509215	GRB 090509A	05:10:05.7162	241.4	-28.4	0	Swift	15	2048	47–291	S, IA
<i>bn090510016</i>	<i>GRB 090510A</i>	00:22:59.9711	333.6	-26.6	0	Swift	1	16	47–291	S, L, IA, K, W, A, AM, SA
bn090510325	GRB 090510B	07:47:39.5123	269.4	-57.9	11.6	Fermi-GBM	8	256	47–291	
bn090511684	GRB 090511A	16:25:16.3719	161.9	51.3	7	Fermi-GBM	15	2048	47–291	IA*
bn090513916	GRB 090513A	21:58:47.9205	269.8	-31.6	4.6	Fermi-GBM	15	2048	47–291	
bn090513941	GRB 090513B	22:35:35.3399	99.1	-72.9	8.8	Fermi-GBM	14	2048	47–291	
bn090514006	GRB 090514A	00:08:39.1570	12.3	-10.9	4.6	Fermi-GBM	10	512	47–291	W
bn090514726	GRB 090514B	17:26:07.3322	304.3	-24.4	5.5	Fermi-GBM	9	256	47–291	K, W, IA
bn090514734	GRB 090514C	17:36:55.2927	316	-44	15.2	Fermi-GBM	17	4096	47–291	
bn090516137	GRB 090516B	03:17:20.1691	122.2	-71.6	2.6	Fermi-GBM	15	2048	47–291	W*
bn090516353	GRB 090516A	08:27:58.3477	138.3	-11.8	0	Swift	17	4096	47–291	S
bn090516853	GRB 090516C	20:28:40.0468	15.7	-13.7	3.5	Fermi-GBM	5	64	47–291	K, IA*
bn090518080	GRB 090518A	01:54:44.5170	120	0.8	0	Swift	11	512	47–291	S
bn090518244	GRB 090518B	05:51:04.6687	211.2	-16.7	4.5	Fermi-GBM	6	128	47–291	

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn090519462	GRB 090519B	11:05:27.5445	105.9	-56.7	3.9	Fermi-GBM	13	1024	47–291	
bn090519881	GRB 090519A	21:08:45.8729	142.3	0.2	0	Swift	15	2048	47–291	S
bn090520832	GRB 090520B	19:57:53.9759	332	43.2	12	Fermi-GBM	8	256	47–291	
bn090520850	GRB 090520C	20:23:19.3082	111.2	-19.7	1.2	Fermi-GBM	9	256	47–291	K, W
bn090520876	GRB 090520D	21:01:37.1455	131.3	-18	4.3	Fermi-GBM	33	1024	23–47	
bn090522344	GRB 090522A	08:15:49.3264	277.7	19.6	4.9	Fermi-GBM	12	1024	47–291	
bn090524346	GRB 090524A	08:17:56.2335	329.5	-67.4	1.3	Fermi-GBM	10	512	47–291	K, IA
bn090528173	GRB 090528A	04:09:01.1411	134.9	-35.8	1	Fermi-GBM	15	2048	47–291	W*
<i>bn090528516</i>	<i>GRB 090528B</i>	12:22:31.2864	312.2	32.7	1	Fermi-GBM	14	2048	47–291	K, W, IA
bn090529310	GRB 090529B	07:26:22.4115	231.2	32.2	7.2	Fermi-GBM	8	256	47–291	IA*
bn090529564	GRB 090529C	13:32:00.4878	162.7	47.3	1.5	Fermi-GBM	4	64	47–291	IA, W, K
bn090530760	GRB 090530B	18:14:24.4343	73.2	13.8	1	Fermi-GBM	12	1024	47–291	IA, W*, K
bn090531775	GRB 090531B	18:35:56.4921	252.1	-36	0	Swift	5	64	47–291	S, W, IA*
bn090602564	GRB 090602A	13:32:22.8543	248.9	-65	3.4	Fermi-GBM	11	512	47–291	W, IA
bn090606471	GRB 090606A	11:18:08.0027	146.9	-70.5	5.5	Fermi-GBM	15	2048	47–291	
bn090608052	GRB 090608A	01:15:26.5975	100.2	-37.4	4.5	Fermi-GBM	14	2048	47–291	
<i>bn090610648</i>	<i>GRB 090610A</i>	15:33:25.9360	84.2	35.4	5.2	Fermi-GBM	10	512	47–291	W, IA*
bn090610723	GRB 090610B	17:21:31.9045	276	-42.1	9.5	Fermi-GBM	17	4096	47–291	
bn090610883	GRB 090610C	21:12:07.7336	70.4	30.3	8.2	Fermi-GBM	14	2048	47–291	
<i>bn090612619</i>	<i>GRB 090612A</i>	14:50:50.4940	81	17.7	2.1	Fermi-GBM	6	128	47–291	K, IA*
bn090616157	GRB 090616A	03:45:42.5323	103.1	-3.7	10.3	Fermi-GBM	9	256	47–291	
<i>bn090617208</i>	<i>GRB 090617A</i>	04:59:58.5756	78.9	15.7	4.2	Fermi-GBM	1	16	47–291	K, W, IA*
<i>bn090618353</i>	<i>GRB 090618A</i>	08:28:26.6590	294	78.4	0	Swift	10	512	47–291	S, K, K-RF, IA, W*, R
<i>bn090620400</i>	<i>GRB 090620A</i>	09:36:23.4676	237.3	61.1	1	Fermi-GBM	8	256	47–291	IA, K, R
bn090620901	GRB 090620B	21:37:35.7510	241.4	-43	8.3	Fermi-GBM	10	512	47–291	
bn090621185	GRB 090621A	04:26:34.4877	11	61.9	0	Swift	14	2048	47–291	S, W*
bn090621417	GRB 090621C	10:00:52.0963	257.5	-28.5	3.2	Fermi-GBM	15	2048	47–291	
bn090621447	GRB 090621D	10:43:45.1445	12.3	-22.6	6.5	Fermi-GBM	12	1024	47–291	
<i>bn090621922</i>	<i>GRB 090621B</i>	22:07:25.7005	313.4	69	0.1	Swift	1	16	47–291	S, K
<i>bn090623107</i>	<i>GRB 090623A</i>	02:34:17.5618	309	-43.2	2	Fermi-GBM	4	64	47–291	IA, W, K

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn090623913	GRB 090623B	21:54:25.1133	41.7	1.8	1.5	Fermi-GBM	10	512	47–291	W
bn090625234	GRB 090625A	05:37:00.2090	20.3	-6.4	3.1	Fermi-GBM	14	2048	47–291	IA*
bn090625560	GRB 090625B	13:26:22.5142	2.3	-65.8	0	Swift	17	4096	47–291	IB, W*, IA*
<i>bn090626189</i>	<i>GRB 090626A</i>	04:32:08.8802	169.3	-36	1	Fermi-GBM	11	512	47–291	K, L, W, IA
bn090626707	GRB 090626B	16:58:45.4644	136.4	14.4	7.7	Fermi-GBM	12	1024	47–291	W
bn090629543	GRB 090629A	13:01:21.7834	8.5	17.7	7.4	Fermi-GBM	17	4096	47–291	
bn090630311	GRB 090630A	07:27:21.1663	146.6	-46.6	5.8	Fermi-GBM	8	256	47–291	IA*
bn090701225	GRB 090701A	05:23:55.8438	114.7	-42.1	4.2	Fermi-GBM	12	1024	47–291	IA*
bn090703329	GRB 090703A	07:54:02.4773	0.8	9.7	5.2	Fermi-GBM	13	1024	47–291	
bn090704242	GRB 090704A	05:47:48.1848	208.2	22.8	0	Integral	15	2048	47–291	IB*
bn090704783	GRB 090704B	18:47:00.6224	296.4	25.9	6.3	Fermi-GBM	17	4096	47–291	
bn090706283	GRB 090706A	06:47:40.4278	205.1	-47.1	3	Fermi-GBM	17	4096	47–291	
bn090708152	GRB 090708A	03:38:18.4565	154.6	26.6	0.1	Swift	17	4096	47–291	S
bn090709630	GRB 090709B	15:07:41.1367	93.6	64.1	0.1	Swift	12	1024	47–291	S, IA*
bn090711850	GRB 090711A	20:23:22.9192	139.6	-64.7	1	Fermi-GBM	13	1024	47–291	W*
bn090712160	GRB 090712A	03:51:00.3413	70.1	22.5	0	Swift	17	4096	47–291	S, W*
bn090713020	GRB 090713A	00:29:28.0600	284.8	-3.3	2.4	Fermi-GBM	14	2048	47–291	
<i>bn090717034</i>	<i>GRB 090717A</i>	00:49:32.1084	92.4	-62.5	1.2	Fermi-GBM	11	512	47–291	IA, K, W
bn090717111	GRB 090717B	02:40:31.7864	246.9	23	3.9	Fermi-GBM	8	256	47–291	IA
bn090718720	GRB 090718A	17:16:42.9331	243.8	-6.7	5.9	Fermi-GBM	14	2048	47–291	
<i>bn090718762</i>	<i>GRB 090718B</i>	18:17:42.8414	274.1	-36.4	1.2	Fermi-GBM	10	512	47–291	K, K-RF
<i>bn090719063</i>	<i>GRB 090719A</i>	01:31:26.6117	341.3	-67.9	1	Fermi-GBM	6	128	47–291	K, K-RF
bn090720276	GRB 090720A	06:38:08.2827	199.5	-16.4	5	Fermi-GBM	7	128	47–291	IA*, K
<i>bn090720710</i>	<i>GRB 090720B</i>	17:02:56.9051	203	-54.8	2.9	Fermi-GBM	1	16	47–291	IA, K, W
bn090725838	GRB 090725A	20:06:20.5520	281.9	-69.5	6.6	Fermi-GBM	17	4096	47–291	
bn090726218	GRB 090726B	05:14:07.0692	240.4	36.8	7.1	Fermi-GBM	13	1024	47–291	W*
<i>bn090730608</i>	<i>GRB 090730A</i>	14:35:07.6683	252.6	30.5	3.7	Fermi-GBM	9	256	47–291	
bn090802235	GRB 090802A	05:39:03.0822	51	37.9	4.9	Fermi-GBM	1	16	47–291	IA*, K
bn090802666	GRB 090802B	15:58:23.4438	267	-71.8	10.7	Fermi-GBM	12	1024	47–291	
bn090804940	GRB 090804A	22:33:20.0192	130.4	-11.3	1	Fermi-GBM	4	64	47–291	IA, K, W

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn090805622	GRB 090805A	14:55:18.2387	300	-50.8	11	Fermi-GBM	12	1024	47–291	
<i>bn090807832</i>	<i>GRB 090807B</i>	19:57:59.0173	326.9	7.2	2.6	Fermi-GBM	25	64	23–47	
<i>bn090809978</i>	<i>GRB 090809B</i>	23:28:14.6112	95.2	0.2	1.2	Fermi-GBM	15	2048	47–291	IA, K
bn090810659	GRB 090810A	15:49:07.8219	168.9	-76.4	5.5	Fermi-GBM	14	2048	47–291	W*
bn090810781	GRB 090810B	18:44:44.8577	116.4	-17.5	2.8	Fermi-GBM	12	1024	47–291	
bn090811696	GRB 090811A	16:41:50.0381	277.1	22.2	7.5	Fermi-GBM	6	128	47–291	
bn090813174	GRB 090813A	04:10:42.5926	225.8	88.6	0	Swift	8	256	47–291	S, K, IA, W
<i>bn090814368</i>	<i>GRB 090814C</i>	08:49:41.2219	332.5	58.9	5.5	Fermi-GBM	4	64	47–291	IA, K
bn090814950	GRB 090814D	22:47:28.7773	307.6	45.7	2.1	Fermi-GBM	16	4096	47–291	K
bn090815300	GRB 090815A	07:12:12.4482	41	-2.7	7.8	Fermi-GBM	15	2048	47–291	
bn090815438	GRB 090815B	10:30:41.8488	21.4	53.4	5.7	Fermi-GBM	15	2048	47–291	IA*
bn090815946	GRB 090815D	22:41:46.5997	251.3	52.9	2.4	Fermi-GBM	17	4096	47–291	
bn090817036	GRB 090817A	00:51:26.2058	64	44.1	0	Integral	9	256	47–291	IB, K, W*
bn090819607	GRB 090819A	14:34:27.4683	49.1	-67.1	3.3	Fermi-GBM	4	64	47–291	IA
<i>bn090820027</i>	<i>GRB 090820A</i>	00:38:16.1887	87.7	27.1	1	Fermi-GBM	8	256	47–291	IA, W*
bn090820509	GRB 090820B	12:13:16.7003	318.3	-18.6	9.6	Fermi-GBM	9	256	47–291	
bn090823133	GRB 090823B	03:10:53.7641	49.5	-17.6	10.4	Fermi-GBM	12	1024	47–291	
bn090824918	GRB 090824A	22:02:19.1051	46.6	59.8	12.2	Fermi-GBM	36	2048	23–47	
bn090826068	GRB 090826A	01:37:31.8544	140.6	-0.1	9.7	Fermi-GBM	12	1024	47–291	W
<i>bn090828099</i>	<i>GRB 090828A</i>	02:22:48.1994	124.4	-26.1	1.2	Fermi-GBM	15	2048	47–291	IA, K, W*
<i>bn090829672</i>	<i>GRB 090829A</i>	16:07:38.8641	329.2	-34.2	1	Fermi-GBM	12	1024	47–291	K, W
bn090829702	GRB 090829B	16:50:40.1331	355	-9.4	3.2	Fermi-GBM	13	1024	47–291	
bn090831317	GRB 090831A	07:36:36.5826	145.1	51	1.9	Fermi-GBM	1	16	47–291	IA, K, W, M
bn090902401	GRB 090902A	09:38:05.4940	291	53.1	3.8	Fermi-GBM	8	256	47–291	IA*, W
<i>bn090902462</i>	<i>GRB 090902B</i>	11:05:08.3127	264.9	27.3	0	Swift	6	128	47–291	IA, W, L
bn090904058	GRB 090904B	01:24:13.9373	264.2	-25.2	0.1	Swift	12	1024	47–291	S, IA, W*
bn090904581	GRB 090904C	13:57:17.1254	261.6	4.6	2.5	Fermi-GBM	10	512	47–291	W*
bn090907017	GRB 090907A	00:24:09.7163	86.3	-38.9	2.1	Fermi-GBM	12	1024	47–291	
bn090907808	GRB 090907B	19:23:47.4743	81.1	20.5	4.1	Fermi-GBM	5	64	47–291	K
bn090908314	GRB 090908A	07:31:52.0875	282.2	3.5	8	Fermi-GBM	17	4096	47–291	

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn090908341	GRB 090908B	08:10:39.8143	174.1	-25.1	4.6	Fermi-GBM	9	256	47–291	IA
bn090909487	GRB 090909A	11:41:17.1795	32.3	53.9	8.1	Fermi-GBM	13	1024	47–291	W*
bn090909854	GRB 090909B	20:29:52.7395	54.2	-25	8.3	Fermi-GBM	5	64	47–291	
bn090910812	GRB 090910A	19:29:48.8069	296.2	72.3	1	Fermi-GBM	12	1024	47–291	K
bn090912660	GRB 090912A	15:50:29.1034	188	61.5	0	Swift	12	1024	47–291	S, W*
bn090915650	GRB 090915A	15:35:35.6511	238	15.5	0	Swift	13	1024	47–291	S*, W
bn090917661	GRB 090917A	15:51:38.9417	230.3	-11.7	5.9	Fermi-GBM	8	256	47–291	W*
bn090920035	GRB 090920A	00:49:59.0621	299.7	-52.2	5.7	Fermi-GBM	18	8192	47–291	
<i>bn090922539</i>	<i>GRB 090922A</i>	12:56:42.1373	17.2	74.3	1	Fermi-GBM	12	1024	47–291	K, W
<i>bn090922605</i>	<i>GRB 090922B</i>	14:30:41.5287	38.4	-73.1	3.3	Fermi-GBM	4	64	47–291	W*
<i>bn090924625</i>	<i>GRB 090924A</i>	14:59:54.0113	69.7	-65	7.1	Fermi-GBM	5	64	47–291	IA
bn090925389	GRB 090925A	09:20:33.6723	333.2	14.3	4.5	Fermi-GBM	15	2048	47–291	IA*, W, K
<i>bn090926181</i>	<i>GRB 090926A</i>	04:20:26.9865	353.4	-66.3	0	Swift	8	256	47–291	IA, L, W, K, K-RF
bn090926914	<i>GRB 090926B</i>	21:55:28.5250	46.3	-39	0.1	Swift	13	1024	47–291	S, M, IA*
bn090927422	GRB 090927A	10:07:17.2136	343.9	-71	0.1	Swift	6	128	47–291	S, IA*, W*
bn090928646	GRB 090928A	15:29:44.6648	103.9	-43.5	8.9	Fermi-GBM	8	256	47–291	W, K
<i>bn090929190</i>	<i>GRB 090929A</i>	04:33:03.9663	51.7	-7.3	1.3	Fermi-GBM	2	32	47–291	IA, W, K, K-RF
bn091002685	GRB 091002A	16:26:11.1643	41.9	-14	4.2	Fermi-GBM	8	256	47–291	
<i>bn091003191</i>	<i>GRB 091003A</i>	04:35:45.5847	251.5	36.6	0	Swift	6	128	47–291	IA, W, K, L
bn091005679	GRB 091005A	16:17:30.4905	43.1	12.1	5.1	Fermi-GBM	12	1024	47–291	
bn091006360	GRB 091006A	08:38:46.9285	243.1	-31	12.8	Fermi-GBM	8	256	47–291	
<i>bn091010113</i>	<i>GRB 091010A</i>	02:43:09.3213	298.7	-22.5	0.1	AGILE	30	256	23–47	IA, SA, K, W
<i>bn091012783</i>	<i>GRB 091012A</i>	18:47:02.7698	109.4	87.3	2.5	Fermi-GBM	4	64	47–291	IA, K, W
bn091015129	GRB 091015B	03:05:42.9372	316.1	-49.5	12.7	Fermi-GBM	35	2048	23–47	
bn091017861	GRB 091017A	20:40:24.2971	210.8	25.5	8.5	Fermi-GBM	12	1024	47–291	W
bn091017985	GRB 091017B	23:38:57.4707	214.4	-64.7	1.7	Fermi-GBM	14	2048	47–291	W*
bn091018957	GRB 091018B	22:58:20.6027	321.8	-23.1	13.1	Fermi-GBM	5	64	47–291	IA
bn091019750	GRB 091019A	18:00:40.8812	226	80.3	12.8	Fermi-GBM	2	32	47–291	
<i>bn091020900</i>	<i>GRB 091020A</i>	21:36:43.8167	175.7	51	0	Swift	8	256	47–291	S, K, IA*
<i>bn091020977</i>	<i>GRB 091020B</i>	23:26:34.4485	187.8	-13.4	2.2	Fermi-GBM	5	64	47–291	K, W*

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn091023021	GRB 091023A	00:29:44.5452	215.4	25.9	7.2	Fermi-GBM	11	512	47–291	W*
bn091024372 ^c	GRB 091024A	08:55:58.4721	339.3	56.9	0	Swift	11	512	47–291	S, IA, K*, K-RF
bn091024380 ^c	GRB 091024A	09:06:29.3574	339.3	56.9	0	Swift	16	4096	47–291	S, IA, K*, K-RF
bn091026485	GRB 091026B	11:38:48.5223	137.1	-23.6	8.2	Fermi-GBM	12	1024	47–291	
bn091026550	GRB 091026A	13:11:33.0196	276.6	-86.1	0	Swift	16	4096	47–291	S, W
bn091030613	GRB 091030B	14:43:16.4358	249	23.5	5.6	Fermi-GBM	10	512	47–291	W
<i>bn091030828</i>	<i>GRB 091030A</i>	19:52:26.8633	41.7	21.5	1.2	Fermi-GBM	9	256	47–291	W*, K
<i>bn091031500</i>	<i>GRB 091031A</i>	12:00:28.8460	70.6	-59.1	1	Fermi-GBM	8	256	47–291	K, K-RF, L, W*
bn091101143	GRB 091101A	03:26:32.4886	29.8	-33.7	2.2	Fermi-GBM	8	256	47–291	K, W
bn091102607	GRB 091102A	14:34:38.3625	72.6	-72.5	0	Swift	11	512	47–291	S, W
bn091103912	GRB 091103A	21:53:51.4847	170.6	11.3	2.4	Fermi-GBM	8	256	47–291	W
bn091106762	GRB 091106A	18:17:12.8908	49.1	60.3	5.6	Fermi-GBM	15	2048	47–291	
bn091107635	GRB 091107A	15:13:59.6296	182.3	38.9	4.5	Fermi-GBM	10	512	47–291	W*
bn091109895	GRB 091109C	21:28:40.0121	247.7	42.3	4.1	Fermi-GBM	8	256	47–291	W*
bn091112737	GRB 091112A	17:41:15.8218	257.7	-36.7	0.1	Swift	10	512	47–291	S, W
bn091112928	GRB 091112B	22:15:51.1901	208.4	37.2	4.5	Fermi-GBM	11	512	47–291	
bn091115177	GRB 091115A	04:14:50.4195	307.8	71.5	7.9	Fermi-GBM	17	4096	47–291	
bn091117080	GRB 091117B	01:55:24.8969	246.5	-73.9	6.8	Fermi-GBM	17	4096	47–291	
<i>bn091120191</i>	<i>GRB 091120A</i>	04:34:40.2297	226.8	-21.8	0.5	MAXI	6	128	47–291	IA, K, M
bn091122163	GRB 091122A	03:54:20.3750	110.9	0.6	18	Fermi-GBM	10	512	47–291	IA
bn091123081	GRB 091123B	01:55:59.7529	337.8	13.3	5.9	Fermi-GBM	10	512	47–291	
bn091123298	GRB 091123A	07:08:37.2603	297.1	-29.2	2.4	Fermi-GBM	14	2048	47–291	IA, K*, W*
bn091126333	GRB 091126A	07:59:24.7624	83.2	-19.3	5.4	Fermi-GBM	1	16	47–291	IA, K, W
<i>bn091126389</i>	<i>GRB 091126B</i>	09:19:48.5326	47.4	31.5	14.3	Fermi-GBM	1	16	47–291	IA*
<i>bn091127976</i>	<i>GRB 091127A</i>	23:25:45.4830	36.6	-19	0	Swift	4	64	47–291	S, W, IA, K
<i>bn091128285</i>	<i>GRB 091128A</i>	06:50:34.6409	127.7	1.7	1.4	Fermi-GBM	11	512	47–291	IA, K
bn091201089	GRB 091201A	02:07:32.9477	27.8	11.9	11.4	Fermi-GBM	17	4096	47–291	
bn091202072	GRB 091202B	01:44:06.5284	257.5	-1.9	12.1	Fermi-GBM	10	512	47–291	W*
bn091202219	GRB 091202C	05:15:42.6582	13.9	9.1	5.8	Fermi-GBM	15	2048	47–291	
bn091207333	GRB 091207A	08:00:10.1058	12.7	-50.2	1.6	Fermi-GBM	8	256	47–291	IA

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
<i>bn091208410</i>	<i>GRB 091208B</i>	09:49:57.9560	29.4	16.9	0	Swift	9	256	47–291	S, IA
bn091209001	GRB 091209A	00:00:44.8977	261	38.3	2.9	Fermi-GBM	14	2048	47–291	
bn091215234	GRB 091215A	05:37:26.8650	283.2	17.6	9.8	Fermi-GBM	12	1024	47–291	
bn091219462	GRB 091219A	11:04:45.4947	294.5	71.9	5.4	Fermi-GBM	9	256	47–291	
bn091220442	GRB 091220A	10:36:50.6362	166.8	4.8	1.8	Fermi-GBM	8	256	47–291	
bn091221870	GRB 091221A	20:52:57.2170	55.8	23.2	0	Swift	17	4096	47–291	S, IA*
bn091223191	GRB 091223A	04:35:10.3548	203.2	76.3	8.8	Fermi-GBM	9	256	47–291	IA
bn091223511	GRB 091223B	12:15:53.6895	231.3	54.7	2.4	Fermi-GBM	14	2048	47–291	
bn091224373	GRB 091224A	08:57:36.5574	331.2	18.3	15.6	Fermi-GBM	5	64	47–291	
bn091227294	GRB 091227A	07:03:13.3858	296.9	2.6	3.6	Fermi-GBM	8	256	47–291	
bn091230260	GRB 091230B	06:14:09.3592	101.5	0.7	18	Fermi-LAT	17	4096	47–291	
bn091230712	GRB 091230C	17:05:14.0175	51.6	77.2	5.1	Fermi-LAT	12	1024	47–291	
bn091231206	GRB 091231A	04:56:33.4876	199.4	-60.7	1.7	Fermi-GBM	13	1024	47–291	K
bn091231540	GRB 091231B	12:57:48.5805	241.3	3.3	12.6	Fermi-GBM	17	4096	47–291	
bn100101028	GRB 100101A	00:39:49.3358	307.3	-27	17.4	Fermi-GBM	8	256	47–291	
bn100101988	GRB 100101B	23:42:15.1827	70.7	18.7	9.3	Fermi-GBM	10	512	47–291	IA
bn100107074	GRB 100107A	01:46:31.8646	6.3	-21.2	6	Fermi-GBM	4	64	47–291	
bn100111176	GRB 100111A	04:12:49.6954	247	15.6	0	Swift	10	512	47–291	S, W
bn100112418	GRB 100112A	10:01:17.5551	240.1	-75.1	14.8	Fermi-GBM	17	4096	47–291	
<i>bn100116897</i>	<i>GRB 100116A</i>	21:31:00.2421	305	14.4	0.3	Fermi-LAT	6	128	47–291	W, K, L, IA
bn100117879	GRB 100117A	21:06:19.6634	11.3	-1.6	0.1	Swift	4	64	47–291	S, IA*
<i>bn100118100</i>	<i>GRB 100118A</i>	02:23:33.6983	9.3	-37.4	5.9	Fermi-GBM	14	2048	47–291	W, K, IA
bn100122616	GRB 100122A	14:47:37.3141	79.2	-2.7	1.3	Fermi-GBM	14	2048	47–291	IA, K
bn100126460	GRB 100126A	11:03:05.1248	338.4	-18.7	18.3	Fermi-GBM	13	1024	47–291	
<i>bn100130729</i>	<i>GRB 100130A</i>	17:29:24.1447	21.2	-24.8	2.5	Fermi-GBM	16	4096	47–291	W, IA
bn100130777	GRB 100130B	18:38:35.4634	78.6	20.8	2.4	Fermi-GBM	14	2048	47–291	W*
<i>bn100131730</i>	<i>GRB 100131A</i>	17:30:57.6702	120.4	16.4	1.2	Fermi-GBM	6	128	47–291	IA, K, W
bn100201588	GRB 100201A	14:06:17.5047	133.1	-37.3	4.3	Fermi-GBM	17	4096	47–291	
bn100204024	GRB 100204A	00:33:53.5451	50.8	-47.9	3	Fermi-GBM	15	2048	47–291	W*
bn100204566	GRB 100204B	13:34:43.3753	273.1	-52.8	5.7	Fermi-GBM	17	4096	47–291	W*

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn100204858	GRB 100204C	20:36:03.7668	91.3	-20.9	16.6	Fermi-GBM	9	256	47–291	
bn100205490	GRB 100205B	11:45:38.2585	133.9	-23	8.2	Fermi-GBM	13	1024	47–291	
<i>bn100206563</i>	<i>GRB 100206A</i>	13:30:05.3902	47.2	13.2	0	Swift	1	16	47–291	S, K, IA*, W
bn100207665	GRB 100207A	15:57:54.7648	307.9	-27.7	4.7	Fermi-GBM	14	2048	47–291	W
bn100207721	GRB 100207B	17:18:29.7243	321.8	-15.8	1	Fermi-GBM	17	4096	47–291	
<i>bn100208386</i>	<i>GRB 100208A</i>	09:15:33.9419	260.2	27.5	29.3	Fermi-GBM	4	64	47–291	IA*
bn100210101	GRB 100210A	02:24:49.4680	244.4	16.1	6.1	Fermi-GBM	13	1024	47–291	
bn100211440	GRB 100211A	10:33:35.1692	132.2	29.5	2.5	Fermi-LAT	17	4096	47–291	IA*, K, W*
bn100212550	GRB 100212B	13:11:45.4692	134.3	32.2	1.4	Fermi-GBM	4	64	47–291	IA*
bn100212588	GRB 100212A	14:07:22.2949	1.8	46	5	Fermi-GBM	10	512	47–291	S
<i>bn100216422</i>	<i>GRB 100216A</i>	10:07:00.1874	154.3	35.5	0	Swift	4	64	47–291	S*
bn100218194	GRB 100218A	04:38:45.9326	206.6	-11.9	2.2	Fermi-LAT	16	4096	47–291	IA*
bn100219026	GRB 100219B	00:37:14.7600	330.9	37.8	2.9	Fermi-GBM	8	256	47–291	
bn100221368	GRB 100221A	08:50:26.4858	27.1	-17.4	8	Fermi-GBM	14	2048	47–291	
<i>bn100223110</i>	<i>GRB 100223A</i>	02:38:09.3064	104.5	3.7	7.8	Fermi-GBM	1	16	47–291	K, IA*, W
bn100224112	GRB 100224B	02:40:55.4771	269.6	-17.1	1.6	Fermi-GBM	15	2048	47–291	K, IA*, W*
<i>bn100225115</i>	<i>GRB 100225A</i>	02:45:31.1468	310.3	-59.4	0.9	Fermi-LAT	8	256	47–291	IA*, L, W
bn100225249	GRB 100225B	05:59:05.4719	352.9	15	18.8	Fermi-GBM	17	4096	47–291	W*
bn100225580	GRB 100225C	13:55:31.3431	314.3	0.2	1.1	Fermi-GBM	13	1024	47–291	IA*, K, W
bn100225703	GRB 100225D	16:52:18.1160	147.9	34	3.9	Fermi-GBM	10	512	47–291	W*
bn100228544	GRB 100228A	13:02:41.2829	199.8	15.6	9.3	Fermi-GBM	17	4096	47–291	
bn100228873	GRB 100228B	20:57:47.6684	118	18.6	11.1	Fermi-GBM	14	2048	47–291	
<i>bn100301068</i>	<i>GRB 100301A</i>	01:37:18.6335	110.1	-15.7	7.3	Fermi-GBM	2	32	47–291	
bn100301223	GRB 100301B	05:21:46.1881	201.8	19.8	4.9	Fermi-GBM	8	256	47–291	
<i>bn100304004</i>	<i>GRB 100304A</i>	00:05:20.7140	76.2	60.5	3.3	Fermi-GBM	12	1024	47–291	IA*, W*
bn100304534	GRB 100304B	12:48:18.5604	260.1	-21.9	2.5	Fermi-GBM	15	2048	47–291	
bn100306199	GRB 100306A	04:46:25.7418	216	-29.4	17.1	Fermi-GBM	16	4096	47–291	
bn100307928	GRB 100307A	22:16:30.2268	129.4	33	4.1	Fermi-GBM	10	512	47–291	
bn100311518	GRB 100311A	12:25:54.1120	303.4	-27.8	5	Fermi-GBM	13	1024	47–291	
bn100313288	GRB 100313A	06:54:23.2203	172.7	-52.6	2.9	Fermi-GBM	10	512	47–291	K

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn100313509	GRB 100313B	12:12:17.2943	186.4	11.7	9.6	Fermi-GBM	16	4096	47–291	
bn100315361	GRB 100315A	08:39:12.7417	208.9	30.1	5.5	Fermi-GBM	16	4096	47–291	
bn100318611	GRB 100318A	14:39:24.6047	211	21.2	10.7	Fermi-GBM	13	1024	47–291	
<i>bn100322045</i>	<i>GRB 100322A</i>	01:05:09.6426	23.3	-10.2	1.2	Fermi-GBM	10	512	47–291	K, IA*, W
bn100323542	GRB 100323A	13:00:44.7544	188.9	-18.7	4.2	Fermi-GBM	14	2048	47–291	W*
<i>bn100324172</i>	<i>GRB 100324B</i>	04:07:36.4874	39.7	-19.3	0.1	Fermi-GBM	4	64	47–291	K, W
bn100325246	GRB 100325B	05:54:43.9487	209.1	-79.1	7.2	Fermi-GBM	11	512	47–291	
bn100325275	GRB 100325A	06:36:08.0232	330.2	-26.5	0.9	Fermi-LAT	9	256	47–291	L, K, IA*
bn100326294	GRB 100326A	07:03:05.5029	131.2	-28.2	12.6	Fermi-GBM	9	256	47–291	
bn100326402	GRB 100326B	09:38:20.0441	314.7	0.5	2.4	Fermi-GBM	12	1024	47–291	
<i>bn100328141</i>	<i>GRB 100328A</i>	03:22:44.6049	155.9	47	4.8	Fermi-GBM	5	64	47–291	IA*
bn100330309	GRB 100330A	07:24:51.7257	202.1	-0.9	2.5	Fermi-GBM	8	256	47–291	K
bn100330856	GRB 100330B	20:32:48.2692	326.4	-7	7.7	Fermi-GBM	12	1024	47–291	
bn100401297	GRB 100401A	07:07:32.2415	290.8	-8.3	0	Swift	9	256	47–291	S*, IA*
bn100406758	GRB 100406A	18:11:25.7765	77.8	26.9	6.5	Fermi-GBM	10	512	47–291	
bn100410356	GRB 100410A	08:31:57.4695	130	21.5	10.8	Fermi-GBM	17	4096	47–291	
<i>bn100410740</i>	<i>GRB 100410B</i>	17:45:46.6619	78.1	61.3	1.7	Fermi-GBM	10	512	47–291	K, W*
bn100411516	GRB 100411A	12:22:57.3442	210.6	47.9	31.6	Fermi-GBM	4	64	47–291	
bn100413732	GRB 100413A	17:33:31.9243	266.2	15.8	0	Swift	14	2048	47–291	S, K*, W*
<i>bn100414097</i>	<i>GRB 100414A</i>	02:20:21.9864	192.1	8.7	0	Fermi-LAT	8	256	47–291	W, K, L
bn100417166	GRB 100417A	03:59:43.7283	261.3	50.4	9.2	Fermi-LAT	1	16	47–291	
bn100417789	GRB 100417B	18:55:40.2857	295.8	9.8	9.4	Fermi-GBM	16	4096	47–291	
bn100420008	GRB 100420B	00:12:06.5986	120.5	-5.8	2.8	Fermi-GBM	8	256	47–291	W
bn100421917	GRB 100421A	21:59:48.3903	350.7	-25.7	2.4	Fermi-GBM	16	4096	47–291	W
<i>bn100423244</i>	<i>GRB 100423B</i>	05:51:25.7503	119.7	5.8	1.5	Fermi-GBM	14	2048	47–291	
bn100424729	GRB 100424B	17:30:10.1284	246.7	-48.9	4.1	Fermi-GBM	13	1024	47–291	W*
bn100424876	GRB 100424C	21:01:52.5901	7.8	43.4	2.4	Fermi-LAT	15	2048	47–291	W
bn100427356	GRB 100427A	08:32:08.7061	89.2	-3.5	0.4	Swift	12	1024	47–291	W, S*
bn100429999	GRB 100429A	23:59:51.6397	89.1	-70	4	Fermi-GBM	12	1024	47–291	IA*, W*
bn100502356	GRB 100502A	08:33:02.9425	131	18.4	2.2	Fermi-GBM	13	1024	47–291	W

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn100503554	GRB 100503A	13:18:03.8898	147.5	4	1.5	Fermi-GBM	16	4096	47–291	IA, W
bn100504806	GRB 100504A	19:20:55.5358	255.6	-35.6	0	Swift	17	4096	47–291	S
bn100506653	GRB 100506A	15:39:49.2949	82.5	59.2	5	Fermi-GBM	14	2048	47–291	W*
bn100507577	GRB 100507A	13:51:15.7277	2.9	-79	2.5	Fermi-GBM	11	512	47–291	
bn100510810	GRB 100510A	19:27:06.9690	355.8	-35.6	0.1	MAXI	15	2048	47–291	M
<i>bn100511035</i>	<i>GRB 100511A</i>	00:49:56.2302	109.3	-4.7	1	Fermi-GBM	11	512	47–291	K
bn100513879	GRB 100513B	21:05:57.6687	321	22.2	2.5	Fermi-GBM	13	1024	47–291	IA*
<i>bn100515467</i>	<i>GRB 100515A</i>	11:13:09.0369	275.5	27	2.2	Fermi-GBM	9	256	47–291	IA*, W, K
bn100516369	GRB 100516A	08:50:41.0629	274.4	-8.2	18.4	Fermi-GBM	4	64	47–291	IA*
bn100516396	GRB 100516B	09:30:38.3170	297.7	18.7	13.7	Fermi-GBM	8	256	47–291	
bn100517072	GRB 100517B	01:43:08.1082	100.9	-29	3.8	Fermi-GBM	25	64	23–47	
bn100517132	GRB 100517C	03:09:50.1229	40.6	-44.3	5.2	Fermi-GBM	8	256	47–291	W
bn100517154	GRB 100517D	03:42:08.0552	243.6	-10.4	4.2	Fermi-GBM	5	64	47–291	
bn100517243	GRB 100517E	05:49:52.1020	10.4	4.4	11.8	Fermi-GBM	12	1024	47–291	W*
bn100517639	GRB 100517F	15:19:58.0247	52.7	-71.9	2.1	Fermi-GBM	11	512	47–291	W*
bn100519204	GRB 100519A	04:53:22.7069	191.5	57.4	1	Fermi-GBM	10	512	47–291	IA*, K
bn100522157	GRB 100522A	03:45:52.2937	7	9.4	0	Swift	7	128	47–291	S, K, IA*, W
bn100525744	GRB 100525A	17:51:25.0815	251.8	41	3.5	Fermi-GBM	4	64	47–291	W
bn100527795	GRB 100527A	19:04:37.2416	226.8	19.8	1.9	Fermi-GBM	17	4096	47–291	W, K
<i>bn100528075</i>	<i>GRB 100528A</i>	01:48:01.1097	311.1	27.8	0.1	AGILE	12	1024	47–291	SA, IA*, K, W*
bn100530737	GRB 100530A	17:41:51.2263	289.7	31	11.6	Fermi-GBM	12	1024	47–291	IA*
bn100604287	GRB 100604A	06:53:34.8147	248.3	-73.2	3.6	Fermi-GBM	13	1024	47–291	IA*, K, W*
bn100605774	GRB 100605A	18:35:10.7438	273.4	-67.6	7.7	Fermi-GBM	13	1024	47–291	
bn100608382	GRB 100608A	09:10:06.3394	30.5	20.4	5.3	Fermi-GBM	17	4096	47–291	
bn100609783	GRB 100609A	18:48:11.3268	90.5	42.8	2.5	Fermi-GBM	14	2048	47–291	
<i>bn100612545</i>	<i>GRB 100612A</i>	13:04:21.6560	63.5	13.7	2.7	Fermi-GBM	5	64	47–291	IA*, K
bn100612726	GRB 100612B	17:26:06.1270	352	-1.8	1.6	Fermi-GBM	8	256	47–291	IA*, K, W
bn100614498	GRB 100614B	11:57:23.3062	224.8	40.9	3	Fermi-GBM	16	4096	47–291	W*
bn100615083	GRB 100615A	01:59:04.3714	177.2	-19.5	0	Swift	9	256	47–291	S, IA, W
bn100616773	GRB 100616A	18:32:32.8957	342.9	3.1	45.7	Fermi-GBM	9	256	47–291	

Table 2—Continued

Trigger ID ^a	GRB Name ^a	Time (UT)	α (°)	δ (°)	Error (°)	Location Source	Algorithm	Timescale (ms)	Energy (keV)	Other Detections ^b
bn100619015	GRB 100619A	00:21:07.0260	84.6	-27	0.1	Swift	10	512	47–291	S, W
bn100620119	GRB 100620A	02:51:29.1134	80.1	-51.7	1.5	Fermi-GBM	13	1024	47–291	IA, W
bn100621452	GRB 100621B	10:51:18.2595	103.8	37.4	2.8	Fermi-GBM	12	1024	47–291	
bn100621529	GRB 100621C	12:42:16.4305	160.9	14.7	11.4	Fermi-GBM	11	512	47–291	IA
<i>bn100625773</i>	<i>GRB 100625A</i>	18:32:28.4721	15.8	-39.1	0	Swift	5	64	47–291	S, IA, K, W
bn100625891	GRB 100625B	21:22:45.1845	338.3	20.3	4.5	Fermi-GBM	14	2048	47–291	W*
bn100629801	GRB 100629A	19:14:03.3527	231.2	27.8	3.3	Fermi-GBM	6	128	47–291	K, IA, W*
<i>bn100701490</i>	<i>GRB 100701B</i>	11:45:23.0690	43.1	-2.2	0.1	Fermi-GBM	5	64	47–291	IA*, W, K
bn100704149	GRB 100704A	03:35:06.1029	133.6	-24.2	0	Swift	8	256	47–291	S, IA*, K
<i>bn100706693</i>	<i>GRB 100706A</i>	16:38:18.9243	255.2	46.9	12.2	Fermi-GBM	6	128	47–291	
<i>bn100707032</i>	<i>GRB 100707A</i>	00:46:38.9870	351.1	-6.6	1	Fermi-GBM	4	64	47–291	K, W, L
<i>bn100709602</i>	<i>GRB 100709A</i>	14:27:32.9828	142.5	17.4	4.5	Fermi-GBM	8	256	47–291	

^aBursts with Trigger ID and GRB Name in italics have significant emission in at least one BGO detector (see text).

^bOther instrument detections: K: Konus-WInd, K-RF: Konus-RF, S: Swift, IA: INTEGRAL SPI-ACS, IB: INTEGRAL Burst Alert System, W: Suzaku-WAM, R: RHESSI, M: MAXI, SA: SuperAGILE, AM: AGILE-MCAL, A: AGILE, L: Fermi LAT

^cGRB091024A triggered GBM twice.

Table 3. GRB Durations (50–300 keV)

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn080714086	3+4+8	5.376 ± 2.360	-0.768	2.816 ± 0.810	-0.256
bn080714425	0+9+10	40.192 ± 1.145	-4.352	11.776 ± 1.619	-1.280
bn080714745	5	59.649 ± 11.276	-0.512	25.088 ± 7.940	2.560
bn080715950	0+1+2+9+10	7.872 ± 0.272	0.128	6.144 ± 0.264	1.088
bn080717543	2+10	36.609 ± 2.985	-5.376	13.056 ± 0.810	1.024
bn080719529	6+7+9	16.128 ± 17.887	-4.352	8.448 ± 1.280	-2.048
bn080720316 ^a	...	...	...	...	...
bn080723557	4	58.369 ± 1.985	2.368	40.513 ± 0.231	14.208
bn080723913	0+1+3	0.192 ± 0.345	-0.064	0.064 ± 0.143	-0.064
bn080723985	2+5	42.817 ± 0.659	3.072	25.280 ± 0.405	12.160
bn080724401	3+4+6+7+8	379.397 ± 2.202	10.816	348.421 ± 0.923	17.216
bn080725435	0+1+3	25.920 ± 1.208	-2.816	10.048 ± 0.320	4.096
bn080725541	6+7+8	0.960 ± 1.292	-0.128	0.316 ± 0.178	0.004
bn080727964	0+3+4+6+7	89.089 ± 6.476	-13.312	21.504 ± 2.290	4.096
bn080730520	0+1+9+10	17.408 ± 6.229	-0.576	4.096 ± 1.448	2.496
bn080730786	0+1+6+9+10	13.312 ± 4.222	-0.576	4.096 ± 1.448	0.448
bn080802386	4+5	0.576 ± 0.091	-0.064	0.448 ± 0.091	0.000
bn080803772	0+1+2+5	26.240 ± 1.691	-0.256	11.072 ± 0.462	3.520
bn080804456	0+1+2+3+5	501.830 ± 6.476	-8.704	450.629 ± 2.896	3.584
bn080804972	6+7+8+11	24.704 ± 1.460	0.256	10.432 ± 0.429	3.520
bn080805496	0+1+3	29.440 ± 3.566	-1.792	17.408 ± 1.846	1.024
bn080805584	3+4+5	65.665 ± 14.676	-4.864	23.808 ± 1.202	1.536
bn080806584	1+2+5	2.304 ± 0.453	-2.112	0.960 ± 0.202	-1.152
bn080806896	0+1+2+9	75.777 ± 4.185	-35.329	28.032 ± 1.382	1.216
bn080807993	0+1+2+5	19.072 ± 0.181	0.000	15.808 ± 0.143	0.512
bn080808451	0+1+2+5	4.352 ± 0.832	-1.536	2.048 ± 0.640	-0.512
bn080808565	6+7+8+11	17.728 ± 1.489	1.728	5.248 ± 0.320	4.352
bn080808772	0+1+3	218.114 ± 11.241	-172.866	69.121 ± 2.187	-108.609
bn080809808	2+10	28.160 ± 2.896	-9.728	12.800 ± 2.290	-2.560
bn080810549	6+7+8+11	107.457 ± 15.413	-20.096	37.121 ± 0.923	5.952
bn080812889	3+4	15.040 ± 0.462	-1.792	7.488 ± 0.286	1.664
bn080815917	9+10	0.832 ± 0.320	-0.320	0.384 ± 0.181	-0.128
bn080816503	0+1+3+4+5	64.769 ± 1.810	1.280	23.296 ± 0.572	36.097
bn080816989	7+8+9+10+11	4.608 ± 0.453	-0.064	0.896 ± 0.580	0.128
bn080817161	1+2+5	60.289 ± 0.466	2.048	16.064 ± 0.202	7.744
bn080817720	3+4+8	4.416 ± 0.363	-0.080	1.536 ± 0.345	1.072
bn080818579	3+4+5	59.329 ± 8.749	-2.944	33.852 ± 1.491	0.005

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn080818945	1+3+5	13.376 ± 0.410	-0.512	6.080 ± 0.466	0.832
bn080821332	3+4	5.888 ± 0.264	-1.280	1.920 ± 0.181	0.256
bn080823363	1+3+4+5	43.457 ± 1.717	-1.280	15.424 ± 0.842	5.760
bn080824909	0+1+3	7.424 ± 2.005	-3.264	2.752 ± 0.231	0.320
bn080825593	0+1+2+9+10	20.992 ± 0.231	1.216	12.160 ± 0.091	3.072
bn080828189	1+2	3.008 ± 3.329	-0.128	1.280 ± 0.202	0.064
bn080829790	1+2	7.680 ± 0.377	-0.320	3.520 ± 0.264	1.088
bn080830368	0+1+3	40.897 ± 5.069	-1.536	9.088 ± 0.724	7.168
bn080831053 ^b	2+5	0.576 ± 1.168	-0.288	0.064 ± 0.631	-0.064
bn080831921	9+10+11	74.497 ± 1.243	1.344	50.689 ± 1.056	7.936
bn080904886	0+1+3+9	17.344 ± 1.385	-2.560	4.608 ± 0.373	4.032
bn080905499	3+6+7	0.960 ± 0.345	-0.064	0.704 ± 0.143	0.000
bn080905570	8+11	26.624 ± 2.896	-7.168	9.211 ± 2.287	0.005
bn080905705	7+8+11	105.984 ± 6.802	-5.120	78.336 ± 1.056	0.768
bn080906212	0+1+3+5	2.875 ± 0.767	0.005	1.280 ± 0.362	0.576
bn080912360	6+7+8+11	16.384 ± 2.896	-3.072	5.114 ± 2.415	0.006
bn080913735	9+10	41.217 ± 7.281	-0.256	10.240 ± 3.238	10.240
bn080916009	0+3+4+6+7	62.977 ± 0.810	1.280	32.000 ± 0.724	6.656
bn080916406	7+8+11	46.337 ± 7.173	0.512	18.432 ± 0.810	2.560
bn080919790	1+2+5	0.512 ± 0.405	-0.128	0.128 ± 0.091	-0.064
bn080920268	0+1+3+9	113.921 ± 3.125	-3.328	51.457 ± 2.673	3.584
bn080924766	0+1+2+9+10	39.937 ± 4.222	-11.264	13.307 ± 1.444	0.005
bn080925775	3+6+7+8	31.744 ± 3.167	-1.024	9.216 ± 1.448	4.096
bn080927480	7+8	45.313 ± 3.083	-0.256	11.520 ± 1.950	2.816
bn080928628	0+3+4+6+7	14.336 ± 4.007	-1.792	8.704 ± 0.810	-0.256
bn081003644	3+4	50.177 ± 3.692	-3.072	17.408 ± 1.448	9.728
bn081006604	0+1+3	6.400 ± 0.923	-0.256	2.301 ± 0.571	0.003
bn081006872	0+1+3	3.328 ± 1.305	-0.512	1.536 ± 0.810	-0.256
bn081008832	0+1+2+5	150.015 ± 12.892	0.004	110.338 ± 1.280	7.680
bn081009140	3+4+7+8	41.345 ± 0.264	1.344	2.688 ± 0.091	2.432
bn081009690 ^c	7+8+11	176.191 ± 2.127	0.003	25.088 ± 1.145	3.136
bn081012045	9+10+11	1.216 ± 1.748	-0.576	0.512 ± 0.362	0.000
bn081012549	6+9+10+11	30.721 ± 5.615	-5.376	6.912 ± 0.724	0.256
bn081017474	1+2+9+10	28.416 ± 2.757	-13.056	8.448 ± 1.619	-3.328
bn081021398	4+5	26.112 ± 3.974	-1.008	10.496 ± 1.145	2.064
bn081022364	3+4+5	17.152 ± 3.727	-2.560	5.376 ± 1.305	-0.512
bn081024245	8+10+11	0.832 ± 1.282	-0.832	0.512 ± 0.231	-0.576

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn081024851	1+3+4+5	56.065 ± 2.064	-0.512	24.320 ± 1.086	7.168
bn081024891	0+6+7+9	0.640 ± 0.264	-0.064	0.384 ± 0.181	0.000
bn081025349	3+4+7+8	22.528 ± 0.724	-0.512	16.384 ± 0.923	2.048
bn081028538	9+10+11	13.312 ± 1.280	-7.936	2.816 ± 0.362	-0.256
bn081101167	4+5	9.984 ± 9.051	-7.936	4.096 ± 1.086	-4.608
bn081101491	6+7+9	0.128 ± 0.091	-0.064	0.064 ± 0.091	0.000
bn081101532	2+5	8.256 ± 0.889	-0.256	4.416 ± 0.320	1.920
bn081102365	0+1+2+5	1.728 ± 0.231	-0.064	1.216 ± 0.143	0.128
bn081102739	0+3+4	34.817 ± 2.415	-0.512	17.152 ± 1.493	3.840
bn081105614	1+2+5	1.280 ± 1.368	-0.064	0.128 ± 0.091	-0.064
bn081107321	6+7+9+10+11	1.664 ± 0.234	-0.192	0.896 ± 0.143	0.256
bn081109293	0+1+2+9+10	58.369 ± 5.221	-6.912	17.408 ± 2.290	2.304
bn081110601	7+8	11.776 ± 2.573	0.256	4.608 ± 1.056	0.512
bn081113230	3+4	0.576 ± 1.350	0.000	0.320 ± 0.143	0.000
bn081115891	0+1+3+4+5	0.320 ± 0.653	-0.192	0.192 ± 0.264	-0.192
bn081118876	0+1+3+5	20.736 ± 1.379	0.256	4.608 ± 0.724	5.376
bn081119184	7+8+11	0.320 ± 0.680	-0.320	0.192 ± 0.231	-0.256
bn081120618	1+2+5	25.344 ± 0.923	-1.280	4.608 ± 0.572	0.256
bn081121858	10+11	41.985 ± 8.510	1.536	9.472 ± 1.145	6.656
bn081122520	0+1+3	23.296 ± 2.111	-0.256	13.568 ± 0.362	0.768
bn081122614	3+4+6+7+8	0.192 ± 0.091	-0.064	0.128 ± 0.091	-0.064
bn081124060	3+4+7+8	19.456 ± 1.086	0.512	9.728 ± 0.724	4.864
bn081125496	10+11	9.280 ± 0.607	0.512	3.200 ± 0.181	2.176
bn081126899	0+1+3	54.145 ± 0.923	-18.048	31.233 ± 0.362	0.768
bn081129161	10+11	62.657 ± 7.318	-0.128	16.384 ± 2.290	1.088
bn081130212	7+8+11	2.240 ± 1.002	-0.064	1.280 ± 0.905	0.064
bn081130629	9+10+11	45.569 ± 3.908	-38.657	28.417 ± 1.864	-25.856
bn081204004	0+1+2+9+10	7.424 ± 1.846	-5.632	1.280 ± 0.923	-0.768
bn081204517	6+7+8+11	0.192 ± 0.286	-0.064	0.128 ± 0.091	-0.064
bn081206275	9+10+11	24.576 ± 5.724	-11.264	10.752 ± 0.724	-1.792
bn081206604	3+4+5	7.936 ± 4.382	-2.048	3.072 ± 1.619	-1.024
bn081206987	9+10+11	22.528 ± 2.919	-5.888	5.888 ± 0.923	-0.768
bn081207680	0+1+9+10	97.282 ± 2.347	5.888	35.905 ± 0.462	24.896
bn081209981	8+11	0.192 ± 0.143	-0.064	0.128 ± 0.143	-0.064
bn081213173	0+1+2+5	0.256 ± 0.286	-0.256	0.192 ± 0.202	-0.192
bn081215784	9+10+11	5.568 ± 0.143	1.216	3.392 ± 0.091	1.728
bn081215880	2+5	7.680 ± 2.064	-0.256	5.632 ± 0.724	0.512

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn081216531	7+8+11	0.768 ± 0.429	0.000	0.128 ± 0.091	0.512
bn081217983	6+7+8+9+11	29.696 ± 12.892	-12.032	7.424 ± 0.724	3.584
bn081221681	1+2	29.697 ± 0.410	3.328	7.488 ± 0.143	19.392
bn081222204	0+1+2	18.880 ± 2.318	0.384	4.672 ± 0.231	2.368
bn081223419	6+7+9	0.576 ± 0.143	-0.064	0.256 ± 0.143	0.000
bn081224887	6+7+9	16.448 ± 1.159	0.736	4.672 ± 0.202	2.336
bn081225257	0+1+2+5	41.217 ± 5.667	-18.688	14.592 ± 0.923	-7.680
bn081226044	2+10	0.832 ± 1.032	-0.192	0.320 ± 0.264	-0.128
bn081226156	3+6+7+8	65.793 ± 1.619	-55.553	41.473 ± 0.572	-34.561
bn081226509	6+7+9	0.192 ± 0.143	-0.064	0.128 ± 0.143	-0.064
bn081229187	0+3+4+6	0.768 ± 0.724	-0.256	0.256 ± 0.572	0.000
bn081229675 ^a	...	...	...	...	...
bn081230871	0+1+6+7+9	0.512 ± 0.272	-0.128	0.256 ± 0.202	-0.064
bn081231140	6+7+9	28.736 ± 2.611	0.640	16.832 ± 0.462	6.080
bn090101758	9+10	108.802 ± 1.619	-0.256	6.144 ± 0.724	89.858
bn090102122	9+10+11	26.624 ± 0.810	1.536	9.728 ± 0.572	6.400
bn090107681	11	18.432 ± 2.896	-2.048	9.212 ± 1.445	0.004
bn090108020	0+1+2+5	0.704 ± 0.143	-0.064	0.256 ± 0.091	0.000
bn090108322	0+1+2+10	0.192 ± 0.143	-0.064	0.128 ± 0.143	-0.064
bn090109332	8+11	1.728 ± 0.820	-0.256	0.512 ± 0.202	-0.192
bn090112332	0+1+3	58.369 ± 4.783	-15.104	24.320 ± 2.064	1.536
bn090112729	9+10	14.080 ± 5.126	-0.768	4.864 ± 0.362	1.792
bn090113778	0+1+2+9	17.408 ± 3.238	-2.048	6.141 ± 1.446	0.004
bn090117335	3+4+7+8	27.264 ± 1.286	-0.384	25.152 ± 0.320	0.384
bn090117632	0+1+9+10	75.777 ± 3.238	-50.177	41.985 ± 5.120	-22.528
bn090117640	0+1+2+9	15.552 ± 4.580	-5.248	2.240 ± 2.084	-0.128
bn090120627	1+2+5	1.856 ± 0.181	-0.512	1.024 ± 0.143	-0.192
bn090126227	6+7+9	5.632 ± 0.810	-1.792	2.816 ± 0.572	-0.768
bn090126245	3+4+6+7+8	0.960 ± 0.231	-0.384	0.640 ± 0.143	-0.256
bn090129880	0+1+3	16.640 ± 3.328	-0.256	6.144 ± 2.290	1.024
bn090131090	0+6+9+10	35.073 ± 1.056	3.072	22.272 ± 0.362	6.656
bn090202347	0+1+2+5	12.608 ± 0.345	0.192	5.376 ± 0.181	4.096
bn090206620	7+9+10+11	0.320 ± 0.143	-0.064	0.128 ± 0.143	0.000
bn090207777	0+1+2+9+10	24.832 ± 3.899	-0.512	7.424 ± 0.923	1.280
bn090213236	0+1+3+7	20.224 ± 6.192	-4.096	12.032 ± 3.114	-2.304
bn090217206	6+7+9+11	33.281 ± 0.724	0.832	9.728 ± 0.362	4.672
bn090219074	5	0.448 ± 0.272	-0.064	0.256 ± 0.345	0.000

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn090222179	9+10+11	17.408 ± 3.238	-2.048	8.192 ± 1.448	1.024
bn090225009	4	2.176 ± 2.833	-1.664	1.600 ± 0.286	-1.536
bn090227310	0+1+3+7	16.189 ± 0.831	0.003	7.424 ± 1.056	1.856
bn090227772	0+1+2	1.280 ± 1.026	-0.064	0.192 ± 0.091	0.000
bn090228204	0+1+3	0.448 ± 0.143	0.000	0.128 ± 0.091	0.000
bn090228976	6+7+9	7.936 ± 1.379	0.000	3.584 ± 1.145	0.512
bn090301315	0+1+3+4+5	23.296 ± 2.064	-17.664	5.632 ± 0.572	-3.584
bn090304216	6+7+8+9	2.816 ± 0.923	-0.256	2.048 ± 0.572	0.256
bn090305052	0+1+3+5	1.856 ± 0.580	-0.064	0.448 ± 0.091	0.256
bn090306245	0+1+3	27.904 ± 14.857	-2.816	11.264 ± 2.573	-0.256
bn090307167	9+10+11	29.440 ± 1.810	-5.120	18.432 ± 1.846	-1.792
bn090308734	3+4+6+7+8	1.664 ± 0.286	-0.320	0.576 ± 0.091	0.256
bn090309767	0+1+6+9	56.513 ± 5.146	-0.512	8.896 ± 0.916	34.561
bn090310189	7+8+11	116.930 ± 1.056	-0.384	57.089 ± 4.783	7.232
bn090316311	9+10+11	10.240 ± 1.557	-9.728	5.632 ± 0.572	-5.632
bn090319622	6+7+9	54.785 ± 2.202	-12.544	25.600 ± 1.086	5.888
bn090320045	6+7+9+11	2.368 ± 0.272	-2.112	1.344 ± 0.231	-1.664
bn090320418	6+7+8+11	7.936 ± 1.296	-1.664	2.624 ± 0.792	-0.768
bn090320801	9+10+11	29.184 ± 4.536	-0.512	10.240 ± 4.382	1.024
bn090323002	6+7+9+11	135.170 ± 1.448	8.192	53.249 ± 2.290	34.816
bn090326633	2+9+10	16.128 ± 3.208	-9.216	6.656 ± 0.724	-0.768
bn090327404	0+1+2+5	14.080 ± 1.379	1.280	5.888 ± 0.810	3.840
bn090328401	3+6+7+8	61.697 ± 1.810	4.352	14.592 ± 0.572	12.288
bn090328713	9+10+11	0.192 ± 1.032	-0.064	0.128 ± 0.143	0.000
bn090330279	6+7+9+10+11	73.473 ± 1.717	-51.969	21.248 ± 1.145	-6.144
bn090331681	6+7+9	0.832 ± 0.143	-0.064	0.704 ± 0.181	-0.064
bn090403314	3+6+7+8	14.848 ± 1.846	-2.304	6.656 ± 0.810	-0.512
bn090405663	7+8+11	0.448 ± 1.498	-0.064	0.192 ± 0.231	-0.064
bn090409288	3+4+5	30.337 ± 2.796	-24.064	12.736 ± 1.920	-8.960
bn090411838	0+2	21.501 ± 3.237	0.003	9.216 ± 1.448	3.072
bn090411991	4+5	14.336 ± 1.086	0.768	6.912 ± 0.724	4.352
bn090412061	3+4+8	0.896 ± 0.264	-0.832	0.128 ± 0.091	-0.128
bn090413122	6+7+8+9+11	32.513 ± 4.360	-22.272	9.216 ± 4.104	-3.072
bn090418816	7+8	0.320 ± 0.405	-0.064	0.256 ± 0.202	-0.064
bn090419997	0+1+2+5	166.915 ± 11.723	-65.793	58.113 ± 3.328	4.352
bn090422150	0+1+9	9.216 ± 0.362	-0.512	8.448 ± 0.362	-0.256
bn090423330	2+9+10	7.168 ± 2.415	-5.888	3.072 ± 1.280	-3.584

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn090424592	6+7+8+11	14.144 ± 0.264	0.512	3.072 ± 0.091	1.280
bn090425377	4	75.393 ± 2.450	3.584	9.344 ± 0.286	58.177
bn090426066	0+1+3+4+5	16.128 ± 5.152	-1.792	4.096 ± 1.056	-1.536
bn090426690	0+1+2+5	7.488 ± 2.496	-1.152	1.984 ± 0.272	0.320
bn090427644	6+7+9	1.024 ± 0.362	-1.792	0.256 ± 0.572	-1.536
bn090427688	1+2+5	12.288 ± 1.280	-1.024	6.400 ± 0.572	1.536
bn090428441	8+11	3.968 ± 1.506	-0.192	1.152 ± 0.716	0.448
bn090428552	4+5	31.489 ± 11.846	-8.448	7.168 ± 1.493	-0.256
bn090429530	2+10	14.336 ± 4.007	-2.560	5.628 ± 0.571	0.004
bn090429753	0+1+9	0.640 ± 0.466	-0.192	0.256 ± 0.143	0.000
bn090502777	7+8+11	66.048 ± 1.619	-9.728	41.984 ± 0.572	0.256
bn090509215	7+8+9+11	283.844 ± 2.463	-1.280	245.763 ± 1.448	5.056
bn090510016	6+7+9	0.960 ± 0.138	-0.048	0.256 ± 0.143	0.528
bn090510325	10+11	7.424 ± 1.717	-1.024	3.328 ± 0.923	0.256
bn090511684	9+10+11	7.616 ± 1.605	-1.472	2.496 ± 0.320	0.000
bn090513916	7+8+11	25.280 ± 7.146	-1.024	11.008 ± 1.691	4.480
bn090513941	5	11.776 ± 2.064	-3.840	6.400 ± 1.280	-1.792
bn090514006	0+1+3	43.521 ± 1.739	0.128	26.240 ± 1.105	1.600
bn090514726	7+8	2.240 ± 0.286	-0.640	0.636 ± 0.140	0.004
bn090514734	4+8	54.401 ± 4.077	-3.072	18.688 ± 1.086	6.592
bn090516137	3+6+7+8	118.018 ± 4.028	10.048	44.289 ± 3.005	50.753
bn090516353	0+3	123.074 ± 2.896	-36.097	47.297 ± 2.290	-2.304
bn090516853	3+4	14.464 ± 3.093	-0.096	6.173 ± 1.469	0.003
bn090518080	3+5	2.048 ± 0.410	-0.640	0.960 ± 0.181	-0.192
bn090518244	8+11	6.784 ± 1.000	-0.384	3.072 ± 1.145	0.256
bn090519462	3+6+7+9	91.329 ± 3.692	-18.944	31.937 ± 1.448	-10.752
bn090519881	0+1+2+9+10	74.177 ± 5.177	-1.536	26.625 ± 1.145	3.776
bn090520832	6+9	0.768 ± 0.834	-0.448	0.256 ± 0.181	-0.256
bn090520850	3+4+8	3.776 ± 0.923	-0.384	2.048 ± 0.572	0.320
bn090520876	0+1+3+5	30.657 ± 0.859	-18.176	7.104 ± 0.528	-0.768
bn090522344	3+4+6+7	20.288 ± 6.262	-4.864	5.184 ± 0.590	0.448
bn090524346	3+4+6+7+8	54.337 ± 0.870	0.896	37.121 ± 0.264	5.696
bn090528173 ^d	1+2+9+10	35.905 ± 2.187	-6.656	17.408 ± 0.604	1.216
bn090528516	3+4+6+7+8	79.041 ± 1.088	4.352	31.553 ± 0.320	12.544
bn090529310	6+7+9+11	3.072 ± 0.362	-0.512	1.792 ± 0.572	0.000
bn090529564	3+4+7+8	9.853 ± 0.179	0.003	8.576 ± 0.091	0.704
bn090530760	1+2+5	127.554 ± 1.319	3.392	58.753 ± 0.373	12.160

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn090531775	6+7+9	0.768 ± 0.231	0.000	0.384 ± 0.231	0.256
bn090602564	10+11	20.736 ± 7.209	-1.536	7.168 ± 1.086	1.024
bn090606471	2+10	8.064 ± 1.262	-1.280	5.568 ± 0.771	-0.384
bn090608052	1+2+5	21.504 ± 2.290	-16.384	6.144 ± 1.448	-4.096
bn090610648	1+3+4+5	6.144 ± 8.136	-4.096	1.280 ± 0.724	-0.512
bn090610723	9+10+11	144.896 ± 3.367	-2.560	100.096 ± 11.082	30.208
bn090610883	2+5	7.424 ± 1.639	-2.816	3.584 ± 0.724	-1.024
bn090612619	1+5	42.433 ± 2.888	-36.097	23.680 ± 2.052	-21.760
bn090616157	0+1+2+5	1.152 ± 1.168	-0.192	0.512 ± 0.231	0.000
bn090617208	0+1+3+5	0.192 ± 0.143	-0.064	0.064 ± 0.091	0.000
bn090618353	4	112.386 ± 1.086	7.936	23.808 ± 0.572	62.465
bn090620400	6+7+8+11	13.568 ± 0.724	0.512	3.840 ± 0.362	3.072
bn090620901	7+9+10+11	0.960 ± 0.272	-0.576	0.448 ± 0.231	-0.384
bn090621185	6+7+9	106.754 ± 14.373	-2.560	31.744 ± 2.429	8.448
bn090621417	6+7+9+10+11	27.009 ± 6.136	-3.840	17.344 ± 2.862	1.984
bn090621447	3+4+7+8	26.112 ± 5.655	-0.256	16.896 ± 0.923	1.536
bn090621922	2+5	0.384 ± 1.032	-0.128	0.128 ± 0.091	-0.064
bn090623107	7+8+9+11	47.105 ± 2.573	0.320	21.248 ± 1.379	3.904
bn090623913	0+1+6+9	7.168 ± 3.114	-0.256	3.328 ± 0.724	1.280
bn090625234	6+7+9	14.336 ± 0.923	-3.584	7.232 ± 0.572	-0.768
bn090625560	4+8	11.776 ± 2.673	-1.536	4.092 ± 0.721	0.004
bn090626189	0+1	48.897 ± 2.828	1.536	31.233 ± 0.362	4.096
bn090626707 ^e	...	...	...	...	...
bn090629543	3+6+7+8	20.480 ± 4.762	-9.472	9.728 ± 1.493	-1.792
bn090630311	1+2+9+10	2.880 ± 0.320	-0.640	0.960 ± 0.181	0.000
bn090701225	0+1+3	4.160 ± 0.692	-3.520	1.344 ± 1.159	-1.536
bn090703329	0+1+9	8.960 ± 1.864	-2.304	3.072 ± 0.923	-0.512
bn090704242	1+2	69.889 ± 5.724	0.512	32.257 ± 1.493	15.104
bn090704783	0+1+6+9	19.456 ± 2.064	-1.792	7.936 ± 1.379	1.280
bn090706283	6+9	119.810 ± 5.030	-35.841	59.137 ± 4.199	-12.800
bn090708152	0+1+2+3+5	21.248 ± 3.167	-3.840	7.680 ± 1.619	-1.280
bn090709630	0+1+2+3+5	22.272 ± 9.230	0.512	4.096 ± 0.810	1.792
bn090711850 ^f	6+7+9	51.969 ± 2.560	-0.768	23.552 ± 2.290	9.216
bn090712160	0+1+3	87.041 ± 7.799	-65.537	31.745 ± 7.799	-22.528
bn090713020	7+9+11	82.817 ± 2.318	1.344	27.392 ± 0.429	9.536
bn090717034	0+1+2+9+10	65.537 ± 1.557	2.304	43.009 ± 0.572	6.144
bn090717111	3+6+7+8	0.384 ± 0.181	-0.192	0.192 ± 0.143	-0.128

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn090718720	3+6+7	76.481 ± 3.416	-0.768	31.681 ± 2.085	5.760
bn090718762	9+10+11	23.744 ± 0.802	3.392	8.448 ± 0.231	14.016
bn090719063	7+8	11.392 ± 0.466	0.896	3.904 ± 0.143	3.136
bn090720276	2+5	3.712 ± 0.724	-1.088	1.597 ± 0.407	0.003
bn090720710	0+1+3+5	10.752 ± 1.056	-0.256	6.144 ± 0.572	0.000
bn090725838	8+11	13.760 ± 1.229	-3.328	8.448 ± 0.859	-0.768
bn090726218 ^e	0+1+2	7.680 ± 0.724	-0.256	3.840 ± 0.572	1.536
bn090730608	1+2+9+10	9.088 ± 1.680	-1.664	3.648 ± 0.320	0.320
bn090802235	2+5	0.128 ± 0.091	-0.064	0.064 ± 0.091	0.000
bn090802666	8+11	27.520 ± 6.192	-0.768	11.968 ± 0.659	1.792
bn090804940	3+4+5	5.568 ± 0.362	0.640	2.560 ± 0.143	1.664
bn090805622	10+11	46.592 ± 2.318	-0.768	20.480 ± 1.448	3.328
bn090807832	6+7+8+9+11	17.920 ± 2.757	-1.280	8.192 ± 2.573	-0.256
bn090809978	3+4+5	11.008 ± 0.320	1.088	3.776 ± 0.091	2.752
bn090810659	2+5	123.458 ± 1.747	1.152	75.201 ± 2.073	38.337
bn090810781	3+4+5	62.977 ± 11.865	0.192	19.712 ± 1.895	4.992
bn090811696	0+1+9	14.848 ± 1.145	-0.256	12.800 ± 0.810	0.000
bn090813174	6+7+9	7.552 ± 0.362	0.384	5.888 ± 0.286	0.640
bn090814368	6+7+9+10+11	0.192 ± 0.143	-0.064	0.128 ± 0.091	0.000
bn090814950	9+10+11	108.610 ± 8.816	-0.256	52.673 ± 2.790	26.048
bn090815300	7+8	48.385 ± 1.086	-1.536	20.224 ± 1.280	2.560
bn090815438	7+8+11	56.321 ± 18.461	-36.865	15.360 ± 3.692	1.024
bn090815946	0+1+2+9	212.992 ± 1.950	-2.304	186.624 ± 2.111	7.936
bn090817036	3+4	52.417 ± 10.657	-13.440	13.312 ± 2.111	1.088
bn090819607	3+6+7+8	0.192 ± 0.202	-0.128	0.064 ± 0.091	-0.064
bn090820027	2+5	12.416 ± 0.181	31.169	4.480 ± 0.091	33.153
bn090820509	6+7+9	15.296 ± 4.610	-0.128	10.301 ± 0.602	0.003
bn090823133	6+7+8+11	63.361 ± 4.545	-53.249	42.177 ± 1.619	-38.913
bn090824918	2	59.905 ± 10.014	-4.608	34.817 ± 1.843	0.512
bn090826068	0+1+3+5	8.704 ± 2.862	-1.024	7.424 ± 0.923	-0.256
bn090828099	4+5	68.417 ± 3.167	-1.024	10.752 ± 0.320	45.825
bn090829672	0+6+7+9+10+11	67.585 ± 2.896	10.240	12.288 ± 1.448	39.937
bn090829702	0+6+7+9+10+11	101.633 ± 2.290	1.792	31.232 ± 2.573	6.400
bn090831317	4+5	39.424 ± 0.572	0.000	22.272 ± 0.810	7.680
bn090902401	7+8	3.200 ± 1.797	-2.304	0.896 ± 0.286	-0.256
bn090902462	0+1+9	19.328 ± 0.286	2.816	9.024 ± 0.181	8.896
bn090904058	2+9+10	56.065 ± 1.846	-3.072	34.305 ± 1.002	7.936

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn090904581	1+2+9+10	38.401 ± 3.093	-2.560	20.992 ± 1.379	3.584
bn090907017	4	39.489 ± 4.443	-12.800	13.248 ± 2.233	1.088
bn090907808	3+6+7+8+9	0.832 ± 0.320	-0.256	0.448 ± 0.143	0.000
bn090908314	9+10+11	67.329 ± 4.700	-59.137	50.433 ± 1.864	-49.665
bn090908341	3+4+5	36.864 ± 0.923	-0.256	15.872 ± 1.305	4.608
bn090909487	8	14.336 ± 2.896	-4.096	7.168 ± 2.896	-1.024
bn090909854	0+1+6+9+10	1.152 ± 2.244	-0.768	0.384 ± 0.202	-0.064
bn090910812	4+8	53.441 ± 13.334	0.832	26.881 ± 0.923	7.232
bn090912660	3+4+5	147.651 ± 9.718	-0.768	88.258 ± 2.534	12.224
bn090915650	0+1+2	76.609 ± 1.559	-0.768	25.792 ± 1.785	2.304
bn090917661	0+3+4+6	26.624 ± 1.134	-0.192	15.360 ± 0.689	1.088
bn090920035	2+10	26.624 ± 1.056	-7.680	12.800 ± 0.810	-3.840
bn090922539	0+1+6+7+9	87.041 ± 0.810	0.512	4.864 ± 0.572	1.792
bn090922605	8+11	52.736 ± 1.810	0.000	20.224 ± 1.056	5.120
bn090924625	0+9+10	0.352 ± 0.101	-0.064	0.096 ± 0.072	-0.032
bn090925389	8+11	25.472 ± 3.525	0.064	11.456 ± 1.275	3.776
bn090926181	3+4+6+7+8	13.760 ± 0.286	2.176	6.528 ± 0.143	4.224
bn090926914	7+8+11	55.553 ± 7.638	1.088	17.984 ± 1.262	13.120
bn090927422	10	0.512 ± 0.231	-0.192	0.320 ± 0.202	-0.128
bn090928646	4+8	15.616 ± 2.611	-0.256	2.816 ± 0.923	1.024
bn090929190	8	6.174 ± 1.298	0.003	2.816 ± 0.572	0.800
bn091002685	6+7+9	2.752 ± 3.089	-1.344	0.640 ± 0.286	-0.320
bn091003191	7+9	20.224 ± 0.362	0.832	13.312 ± 0.724	5.696
bn091005679	6+7+8+11	6.976 ± 0.572	-4.672	3.136 ± 0.730	-1.984
bn091006360	1+2+5	0.192 ± 0.091	-0.192	0.064 ± 0.181	-0.128
bn091010113	3+4+6	5.952 ± 0.143	0.128	1.088 ± 0.580	1.984
bn091012783	10+11	0.704 ± 2.499	0.000	0.320 ± 0.091	0.256
bn091015129	5	3.840 ± 0.590	-2.304	1.472 ± 0.320	-1.536
bn091017861	3+4+5	2.624 ± 0.462	-0.832	0.960 ± 0.231	-0.384
bn091017985	0+1+3+7+9	44.800 ± 3.367	-1.792	16.640 ± 2.360	2.048
bn091018957	11	0.192 ± 0.286	-0.064	0.064 ± 0.091	-0.064
bn091019750	0+1+2	0.208 ± 0.172	-0.112	0.016 ± 0.036	-0.032
bn091020900	2+5	24.256 ± 7.973	-3.584	6.912 ± 0.668	1.664
bn091020977	0+1+3+4+5	37.505 ± 0.905	0.992	21.696 ± 0.373	2.848
bn091023021	2+4+5	6.528 ± 1.857	-0.448	1.792 ± 0.345	-0.192
bn091024372 ^g	7+8+11	93.954 ± 5.221	-3.072	39.937 ± 1.056	4.352
bn091024380 ^g	6+7+9	450.569 ± 2.360	2.048	100.610 ± 0.923	222.724

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn091026485	1+2	3.328 ± 0.779	-0.896	1.536 ± 0.286	-0.384
bn091026550	4	8.960 ± 1.379	-5.120	3.840 ± 0.810	-4.096
bn091030613	3+4+6+7	19.200 ± 0.871	0.576	9.472 ± 0.345	5.504
bn091030828	8+10+11	98.050 ± 4.128	0.832	24.832 ± 1.493	7.232
bn091031500	1+6+7+9	33.921 ± 0.462	1.408	8.192 ± 0.231	7.040
bn091101143	10+11	10.688 ± 0.842	0.192	5.056 ± 0.320	1.728
bn091102607	2+10	6.656 ± 3.435	-0.768	2.813 ± 1.618	0.003
bn091103912	3+4+5	13.568 ± 6.023	-2.048	4.288 ± 0.373	0.832
bn091106762	10	14.592 ± 16.147	-1.280	11.008 ± 0.923	1.280
bn091107635	0+3+4+6+7	11.008 ± 10.546	-2.816	2.048 ± 0.572	-0.512
bn091109895	0+1+3	30.977 ± 4.580	-5.376	20.224 ± 2.064	0.768
bn091112737	3+4+5	24.576 ± 0.923	-0.768	7.680 ± 0.362	3.840
bn091112928	1+3+4+5	21.184 ± 0.977	-0.768	9.664 ± 0.659	3.648
bn091115177	0+1+3+5	37.376 ± 2.360	-1.536	18.432 ± 1.639	8.192
bn091117080	2+5	113.664 ± 2.360	-4.352	96.000 ± 1.145	4.352
bn091120191	0+1+3+5	50.177 ± 2.111	1.024	20.992 ± 2.290	9.216
bn091122163	7+9+11	1.984 ± 1.925	-1.472	0.448 ± 1.368	-0.256
bn091123081	8+11	15.552 ± 1.866	-9.984	5.376 ± 0.604	-1.344
bn091123298 ^c	2+5	604.491 ± 11.676	4.096	365.574 ± 8.749	63.489
bn091126333	7+8+11	0.192 ± 0.091	-0.064	0.128 ± 0.091	-0.064
bn091126389 ^h	...	...	...	...	...
bn091127976	6+7+9	8.701 ± 0.571	0.003	5.120 ± 0.362	0.512
bn091128285	9+10	87.810 ± 13.662	-23.297	22.528 ± 3.238	5.120
bn091201089	6+7+8+9+11	12.992 ± 2.010	-7.744	5.952 ± 0.951	-4.288
bn091202072	0+1+3+5	27.648 ± 3.566	-5.120	10.240 ± 0.923	-0.768
bn091202219	9+10+11	111.106 ± 3.692	-38.913	40.449 ± 2.560	6.144
bn091207333	0+1+9+10	27.073 ± 0.916	0.256	8.000 ± 0.607	2.432
bn091208410	0+9+10	12.480 ± 5.018	-0.128	7.168 ± 0.630	1.856
bn091209001	4	42.945 ± 8.035	-5.888	11.392 ± 0.771	2.304
bn091215234	3+4+5	4.352 ± 0.362	-2.048	2.304 ± 0.362	-1.536
bn091219462	0+1+9	8.128 ± 1.866	-0.192	2.048 ± 0.643	0.192
bn091220442	0+1+9+10	18.368 ± 0.590	0.384	5.696 ± 0.345	2.048
bn091221870 ⁱ	6+7+9+10+11	23.040 ± 5.177	6.144	9.216 ± 1.056	14.592
bn091223191	3+6+7+8	0.576 ± 0.181	-0.256	0.192 ± 0.143	-0.192
bn091223511	1+2+9+10	49.725 ± 1.379	0.004	19.840 ± 0.462	7.360
bn091224373	1+2	0.768 ± 0.231	-0.192	0.384 ± 0.143	-0.128
bn091227294	1+2+5	21.888 ± 0.889	-1.280	7.232 ± 0.792	2.048

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn091230260	6+7+8+9+11	62.976 ± 3.874	-3.840	36.096 ± 1.493	0.000
bn091230712	8+11	35.137 ± 3.974	-0.512	7.424 ± 0.945	1.920
bn091231206	0+3+4+6+7	42.561 ± 3.664	2.624	17.984 ± 1.002	7.232
bn091231540	3+4+5	15.616 ± 2.757	-7.680	4.352 ± 0.724	-0.768
bn100101028	3	2.816 ± 0.320	-0.256	1.344 ± 0.091	-0.128
bn100101988	0+6+9+10	1.984 ± 2.049	-1.024	0.832 ± 0.143	-0.512
bn100107074 ^j	0	0.576 ± 0.465	-0.048	0.032 ± 0.179	-0.048
bn100111176	3+6+7	19.520 ± 5.367	-10.752	6.784 ± 0.810	-4.096
bn100112418	0+1+3+4+5	23.040 ± 0.572	-4.352	9.472 ± 0.923	-0.768
bn100116897	0+1+3	102.530 ± 1.485	0.576	5.504 ± 0.181	89.602
bn100117879	3+4+8	0.256 ± 0.834	-0.064	0.064 ± 0.181	0.000
bn100118100	1+2+5	9.216 ± 6.720	-2.304	2.560 ± 0.923	-0.768
bn100122616	6+7+9	22.529 ± 2.769	5.120	2.304 ± 0.572	20.736
bn100126460	1+2+5	10.624 ± 12.673	-1.280	9.088 ± 1.243	-0.512
bn100130729	0+3+4+6+7	99.074 ± 3.328	-6.400	13.568 ± 0.724	63.745
bn100130777	7+8+11	86.018 ± 6.988	-10.240	34.049 ± 1.493	5.632
bn100131730	6+7	3.520 ± 0.453	0.192	1.408 ± 0.202	0.576
bn100201588	0+6+7+9+10+11	122.114 ± 1.280	0.256	74.241 ± 1.864	17.152
bn100204024	6+7+9+10+11	136.195 ± 27.554	-95.234	21.504 ± 2.896	-7.168
bn100204566	2+5	32.513 ± 2.862	-30.209	20.480 ± 0.572	-22.529
bn100204858	10+11	1.920 ± 2.375	-0.640	0.256 ± 0.202	-0.192
bn100205490	10+11	14.848 ± 2.290	-1.024	3.584 ± 1.145	0.000
bn100206563	0+1+3	0.128 ± 0.091	-0.064	0.064 ± 0.143	0.000
bn100207665	4+5	15.360 ± 3.874	-2.816	8.192 ± 0.724	-0.768
bn100207721	0+1+3+5	17.728 ± 6.492	-9.216	8.768 ± 1.073	-3.072
bn100208386	0+1+9	0.192 ± 0.264	-0.064	0.128 ± 0.091	-0.064
bn100210101	0+1+2+9+10	29.184 ± 5.655	-10.240	5.632 ± 1.145	-1.024
bn100211440	10+11	21.376 ± 0.923	0.640	8.960 ± 0.373	7.360
bn100212550	6+7+9	3.773 ± 0.270	0.003	2.368 ± 0.231	0.768
bn100212588	0+3	2.496 ± 0.202	-0.448	0.768 ± 0.143	-0.256
bn100216422	6+9+11	0.192 ± 0.143	-0.064	0.128 ± 0.091	-0.064
bn100218194	0+1+9	29.185 ± 5.813	-3.584	13.696 ± 2.033	1.664
bn100219026	2+5	59.712 ± 4.955	-12.416	26.880 ± 1.336	1.152
bn100221368	3+4+5	23.553 ± 1.032	-3.328	8.960 ± 0.551	0.320
bn100223110	7+8+11	0.256 ± 0.091	-0.064	0.064 ± 0.091	0.064
bn100224112	3+4	67.329 ± 6.988	-3.584	7.936 ± 1.459	10.816
bn100225115	0+1+3+4+5	12.992 ± 1.925	-0.256	5.056 ± 0.320	3.136

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn100225249	2+5	32.000 ± 20.419	-0.512	16.896 ± 7.701	2.560
bn100225580	0+1+3+4+5	6.400 ± 1.086	-0.512	2.304 ± 0.724	1.536
bn100225703	0+6+9+10+11	4.480 ± 1.431	-1.152	1.920 ± 0.572	0.000
bn100228544	9+10+11	67.072 ± 4.720	-3.072	33.280 ± 1.846	3.072
bn100228873	0+6+9+10+11	8.704 ± 2.318	-2.048	3.072 ± 0.810	-1.280
bn100301068	6+9	0.960 ± 1.002	-0.896	0.064 ± 0.091	-0.064
bn100301223	0+9+10	26.625 ± 1.431	-0.256	6.784 ± 0.932	2.944
bn100304004	8+11	181.507 ± 21.682	-2.560	97.538 ± 16.766	10.752
bn100304534	2	19.008 ± 2.782	-9.472	5.888 ± 1.132	-1.024
bn100306199	6+7+8+11	7.168 ± 2.064	-4.352	3.328 ± 0.572	-3.072
bn100307928	9+10+11	16.128 ± 2.187	-3.072	6.400 ± 1.379	-0.768
bn100311518	3+4+5	9.024 ± 1.042	-0.256	3.968 ± 0.572	2.240
bn100313288	0+9+10	12.864 ± 2.099	-2.816	3.904 ± 0.286	0.832
bn100313509	6+7+9+11	34.048 ± 2.996	-3.072	17.408 ± 1.280	2.560
bn100315361	0+1+3	35.584 ± 2.290	-4.608	16.896 ± 1.086	-0.256
bn100318611	9+10+11	18.432 ± 0.923	-1.792	7.168 ± 0.724	0.000
bn100322045	1+2+5	37.121 ± 0.231	1.152	26.369 ± 0.181	7.424
bn100323542	8+11	60.673 ± 3.620	-5.632	53.505 ± 1.950	-0.768
bn100324172	1+2+5	17.920 ± 2.064	0.576	3.840 ± 0.362	2.368
bn100325246	0+1+3	8.192 ± 1.086	-1.536	4.608 ± 0.572	-0.512
bn100325275	0+1+3	7.104 ± 1.619	-0.384	4.096 ± 0.724	0.576
bn100326294	9+10	5.632 ± 2.064	-5.376	3.584 ± 2.111	-3.584
bn100326402	3+4+5	171.011 ± 29.126	-72.705	36.865 ± 5.793	-5.120
bn100328141	6+7+9+11	0.384 ± 0.143	-0.064	0.192 ± 0.091	0.064
bn100330309	7+9+10+11	10.048 ± 0.318	0.064	4.096 ± 0.272	1.280
bn100330856	0+1+3+9	5.120 ± 0.453	-1.152	1.024 ± 0.466	-0.640
bn100401297	0+1+2+3+5	92.416 ± 4.291	-6.656	79.616 ± 0.724	-0.256
bn100406758	1+2+5	5.888 ± 2.919	-1.280	2.557 ± 1.377	0.003
bn100410356	4+8	9.728 ± 2.202	-5.888	3.328 ± 1.086	-3.328
bn100410740	1+2+5	22.016 ± 4.700	-1.024	14.080 ± 4.222	1.280
bn100411516	9+10+11	0.512 ± 0.231	-0.064	0.448 ± 0.143	-0.064
bn100413732	7+8+11	179.651 ± 2.817	-0.512	96.258 ± 2.445	34.689
bn100414097	6+7+9+11	26.497 ± 2.073	1.856	13.248 ± 0.272	8.192
bn100417166	6+7+9	0.192 ± 0.091	-0.064	0.128 ± 0.091	-0.064
bn100417789	2+10	52.545 ± 1.856	-2.560	15.552 ± 0.604	0.192
bn100420008	3+4+5	20.288 ± 0.405	0.192	8.704 ± 0.231	1.920
bn100421917	1+2	47.489 ± 10.849	-22.272	16.960 ± 1.494	1.216

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn100423244	3+4+6+7	16.512 ± 2.226	1.600	6.976 ± 0.362	5.312
bn100424729	7+8+11	175.107 ± 1.493	-25.345	83.201 ± 1.717	15.872
bn100424876	0+1+5	169.987 ± 3.557	-2.048	20.480 ± 2.290	131.074
bn100427356	0+3+6+7	12.544 ± 7.389	-4.864	4.544 ± 0.630	0.640
bn100429999	6+7+9	25.024 ± 6.582	-12.800	6.656 ± 0.547	-0.512
bn100502356	3+4+7+8	95.810 ± 2.382	-2.816	53.633 ± 1.118	12.224
bn100503554	3+4+6+7+8	129.602 ± 10.230	6.592	35.009 ± 13.785	33.409
bn100504806	11	16.512 ± 1.810	1.216	8.320 ± 1.834	4.672
bn100506653	3+4+5	21.376 ± 1.891	-7.936	6.976 ± 0.800	0.192
bn100507577	9+10+11	44.033 ± 5.221	-1.024	14.336 ± 1.448	5.120
bn100510810	4	31.169 ± 4.017	-3.328	10.368 ± 0.975	0.640
bn100511035	3+6+7	42.433 ± 1.478	0.832	9.408 ± 0.091	17.856
bn100513879	4+6+7+8	11.136 ± 1.145	-0.768	3.456 ± 0.286	2.176
bn100515467	6+7+8+11	10.624 ± 1.431	-0.640	1.920 ± 0.231	0.704
bn100516369	6+7+8+11	2.112 ± 1.134	-1.920	1.024 ± 0.771	-1.024
bn100516396	6+7+8+11	0.640 ± 0.487	-0.576	0.128 ± 0.143	-0.192
bn100517072	0+1+2+9+10	55.808 ± 1.810	0.000	36.352 ± 0.572	1.280
bn100517132	3+6+7	19.840 ± 3.620	-0.512	9.856 ± 1.708	0.640
bn100517154	7+8+11	30.464 ± 0.810	-0.256	24.576 ± 0.572	0.256
bn100517243	1+2+3+5	29.633 ± 4.482	-13.568	10.816 ± 0.889	-6.656
bn100517639	3+4+7	5.440 ± 0.604	-0.768	2.816 ± 0.231	0.960
bn100519204	3+6+7+8	62.913 ± 3.929	0.640	24.960 ± 0.680	8.768
bn100522157	1+2+3+5	35.326 ± 0.715	0.003	11.712 ± 1.541	0.768
bn100525744	9+10	1.472 ± 1.974	-0.384	0.576 ± 0.462	-0.128
bn100527795	9+10+11	184.579 ± 3.238	-92.674	51.905 ± 2.010	12.864
bn100528075	6+7+9	22.464 ± 0.749	-0.256	7.040 ± 0.091	5.056
bn100530737	9+10+11	3.328 ± 0.810	-1.024	2.048 ± 0.572	-0.512
bn100604287	0+1+2+9+10	13.440 ± 0.871	-2.304	3.968 ± 0.231	1.920
bn100605774	6+7+9	8.192 ± 2.862	-1.024	3.072 ± 0.810	-0.256
bn100608382	3+6+7	30.208 ± 1.619	-7.680	14.848 ± 1.619	-2.304
bn100609783	3+4+5	230.404 ± 8.689	6.144	64.513 ± 22.737	32.769
bn100612545	2+5	0.576 ± 0.181	0.000	0.320 ± 0.143	0.064
bn100612726	3+4+7+8	8.576 ± 3.210	0.704	2.624 ± 0.286	2.432
bn100614498	6+7+9+10+11	172.291 ± 12.447	-149.763	72.193 ± 5.346	-74.497
bn100615083	6+7+8	37.377 ± 0.979	0.320	26.368 ± 0.689	2.944
bn100616773	10+11	0.192 ± 0.143	-0.192	0.128 ± 0.091	-0.192
bn100619015	2+5	96.002 ± 1.319	0.384	80.642 ± 0.231	7.744

Table 3—Continued

Trigger ID	Detectors Used	T_{90} (s)	T_{90} start (s)	T_{50} (s)	T_{50} start (s)
bn100620119	6+7	51.841 ± 8.518	0.192	11.520 ± 0.861	3.008
bn100621452	1+3+4+5	123.906 ± 5.515	-6.656	89.601 ± 3.238	1.536
bn100621529	0+1+2+9+10	1.024 ± 0.202	-0.448	0.384 ± 0.143	-0.192
bn100625773	4	0.192 ± 0.143	-0.064	0.064 ± 0.143	0.000
bn100625891	3+6+7+8	29.184 ± 1.086	-7.424	18.432 ± 0.923	0.512
bn100629801	10+11	0.832 ± 0.373	-0.128	0.320 ± 0.143	0.000
bn100701490	4+5	22.016 ± 5.568	0.096	4.992 ± 0.264	3.552
bn100704149	0+1+2	214.404 ± 5.917	-38.145	11.648 ± 1.231	1.344
bn100706693	8+9+10+11	0.128 ± 0.143	-0.128	0.064 ± 0.091	-0.064
bn100707032	7+8	81.793 ± 1.218	1.088	20.672 ± 0.345	3.712
bn100709602	4+5	100.098 ± 1.527	-2.560	61.505 ± 0.724	3.584

^aData problems precluded duration analysis.

^bUsed TTE binned at 32 ms.

^cPartial earth occultation is likely; durations are lower limits.

^dPossible precursor at $\sim T_0 - 120$ s.

^eData cut off while burst in progress; durations are lower limits.

^fSAA entry at $T_0 + 83$ s; durations are lower limits.

^gGRB091024 triggered GBM twice.

^hToo weak to measure durations; visual duration is ~ 0.025 s.

ⁱPossible contamination due to emergence of Crab & A0535+26 from Earth occultation.

^jUsed TTE binned at 16 ms.

Table 4. GRB Fluence & Peak Flux (10–1000 keV)

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn080714086	6.76E-07 ± 4.10E-08	3.82 ± 1.06	2.24 ± 0.36	1.54 ± 0.18
bn080714425	1.81E-06 ± 2.10E-08	4.00 ± 1.45	2.96 ± 0.46	2.02 ± 0.21
bn080714745	6.33E-06 ± 1.41E-07	8.89 ± 1.61	7.78 ± 0.83	6.93 ± 0.39
bn080715950	5.04E-06 ± 8.00E-08	19.42 ± 0.95	13.58 ± 0.45	9.91 ± 0.22
bn080717543	4.46E-06 ± 7.70E-08	6.24 ± 1.08	3.43 ± 0.49	2.89 ± 0.23
bn080719529	7.75E-07 ± 2.90E-08	2.77 ± 0.83	1.77 ± 0.29	1.12 ± 0.16
bn080720316	...	...	...	...
bn080723557	7.22E-05 ± 2.54E-07	40.97 ± 2.24	38.24 ± 1.09	30.45 ± 0.49
bn080723913	1.34E-07 ± 1.40E-08	5.26 ± 0.70	4.13 ± 0.32	1.41 ± 0.13
bn080723985	3.08E-05 ± 2.07E-07	13.45 ± 1.24	11.36 ± 0.60	10.12 ± 0.28
bn080724401	1.57E-05 ± 5.00E-08	22.73 ± 1.31	18.98 ± 0.62	12.20 ± 0.29
bn080725435	7.99E-06 ± 4.40E-08	5.38 ± 0.77	4.28 ± 0.38	3.36 ± 0.17
bn080725541	4.92E-07 ± 4.40E-08	6.27 ± 0.78	5.13 ± 0.36	1.69 ± 0.13
bn080727964	1.33E-05 ± 7.90E-08	6.44 ± 0.92	4.17 ± 0.42	3.53 ± 0.18
bn080730520	4.87E-06 ± 9.90E-08	7.83 ± 1.03	6.34 ± 0.46	5.60 ± 0.22
bn080730786	6.35E-06 ± 8.30E-08	16.89 ± 0.94	16.44 ± 0.45	14.62 ± 0.23
bn080802386	3.98E-07 ± 7.00E-09	10.41 ± 1.12	7.06 ± 0.35	2.95 ± 0.17
bn080803772	4.39E-06 ± 7.40E-08	3.37 ± 0.67	2.26 ± 0.26	1.78 ± 0.11
bn080804456	8.00E-06 ± 8.60E-08	3.96 ± 0.68	2.80 ± 0.34	1.94 ± 0.14
bn080804972	9.13E-06 ± 1.06E-07	5.81 ± 0.76	4.40 ± 0.36	3.85 ± 0.16
bn080805496	1.75E-06 ± 4.80E-08	4.77 ± 1.07	3.92 ± 0.53	3.05 ± 0.23
bn080805584	4.38E-06 ± 6.40E-08	4.55 ± 1.32	3.03 ± 0.48	1.77 ± 0.17
bn080806584	4.31E-07 ± 2.50E-08	4.33 ± 0.83	2.84 ± 0.32	2.39 ± 0.16
bn080806896	1.33E-05 ± 1.94E-07	11.20 ± 0.94	9.32 ± 0.43	8.18 ± 0.21
bn080807993	7.30E-06 ± 9.00E-08	19.42 ± 0.82	15.24 ± 0.39	8.88 ± 0.18
bn080808451	7.10E-07 ± 4.00E-08	2.70 ± 0.69	2.33 ± 0.30	1.75 ± 0.14
bn080808565	3.97E-06 ± 4.20E-08	7.79 ± 0.87	6.81 ± 0.50	5.98 ± 0.22
bn080808772	6.64E-06 ± 5.50E-08	4.03 ± 1.02	3.07 ± 0.37	1.83 ± 0.21
bn080809808	4.14E-06 ± 5.50E-08	9.19 ± 1.42	5.29 ± 0.62	3.76 ± 0.27
bn080810549	1.08E-05 ± 4.80E-08	6.76 ± 1.26	4.85 ± 0.59	3.57 ± 0.21
bn080812889	2.46E-06 ± 4.20E-08	5.20 ± 0.95	2.90 ± 0.44	1.91 ± 0.17
bn080815917	4.69E-07 ± 2.70E-08	6.26 ± 0.97	4.58 ± 0.43	3.26 ± 0.21

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn080816503	1.33E-05 ± 8.30E-08	9.90 ± 0.76	8.91 ± 0.37	7.44 ± 0.18
bn080816989	3.30E-06 ± 9.20E-08	9.27 ± 0.62	7.19 ± 0.29	5.21 ± 0.13
bn080817161	5.33E-05 ± 7.30E-08	17.44 ± 1.04	14.65 ± 0.52	13.67 ± 0.24
bn080817720	1.82E-06 ± 4.10E-08	7.93 ± 0.92	5.24 ± 0.47	3.59 ± 0.21
bn080818579	3.80E-06 ± 5.80E-08	7.34 ± 0.85	6.32 ± 0.40	4.58 ± 0.19
bn080818945	1.74E-06 ± 2.40E-08	6.22 ± 0.89	5.08 ± 0.33	4.01 ± 0.19
bn080821332	3.59E-06 ± 1.80E-08	11.42 ± 1.11	10.72 ± 0.59	9.64 ± 0.27
bn080823363	5.55E-06 ± 3.60E-08	6.72 ± 0.90	5.60 ± 0.48	4.62 ± 0.21
bn080824909	2.73E-06 ± 5.90E-08	12.87 ± 0.98	11.20 ± 0.52	7.26 ± 0.23
bn080825593	3.42E-05 ± 9.70E-08	31.30 ± 1.12	29.43 ± 0.60	25.30 ± 0.27
bn080828189	4.11E-07 ± 1.70E-08	5.62 ± 0.98	2.84 ± 0.35	1.40 ± 0.15
bn080829790	2.53E-06 ± 2.20E-08	7.05 ± 1.29	5.33 ± 0.48	4.48 ± 0.24
bn080830368	7.00E-06 ± 1.10E-07	6.49 ± 0.80	5.33 ± 0.37	4.67 ± 0.18
bn080831053	5.60E-08 ± 1.70E-08	4.66 ± 1.10	1.12 ± 0.46	0.33 ± 0.20
bn080831921	8.47E-06 ± 4.00E-08	5.54 ± 1.12	3.96 ± 0.50	2.85 ± 0.21
bn080904886	5.25E-06 ± 7.10E-08	19.16 ± 1.23	17.39 ± 0.58	15.84 ± 0.27
bn080905499	8.50E-07 ± 4.60E-08	6.32 ± 0.68	4.70 ± 0.31	2.34 ± 0.14
bn080905570	4.09E-06 ± 5.60E-08	8.14 ± 1.33	6.95 ± 0.60	5.36 ± 0.27
bn080905705	2.91E-06 ± 3.60E-08	4.08 ± 1.10	3.30 ± 0.40	2.32 ± 0.23
bn080906212	5.87E-06 ± 1.39E-07	24.84 ± 1.45	22.88 ± 0.69	20.29 ± 0.33
bn080912360	2.13E-06 ± 3.00E-08	4.82 ± 0.70	3.01 ± 0.28	2.48 ± 0.15
bn080913735	3.55E-06 ± 8.70E-08	5.99 ± 0.88	4.88 ± 0.40	3.40 ± 0.18
bn080916009	6.03E-05 ± 7.00E-08	16.40 ± 1.65	15.09 ± 0.64	13.66 ± 0.29
bn080916406	7.81E-06 ± 8.20E-08	7.10 ± 1.35	5.56 ± 0.32	4.47 ± 0.29
bn080919790	4.60E-08 ± 5.00E-09	4.56 ± 1.14	2.51 ± 0.47	0.68 ± 0.18
bn080920268	1.87E-06 ± 6.30E-08	3.49 ± 0.78	1.61 ± 0.26	1.08 ± 0.11
bn080924766	4.73E-06 ± 7.90E-08	6.74 ± 0.84	5.79 ± 0.41	4.76 ± 0.19
bn080925775	1.85E-05 ± 4.00E-08	17.21 ± 1.00	15.80 ± 0.50	15.40 ± 0.24
bn080927480	2.96E-06 ± 9.60E-08	4.99 ± 1.33	3.38 ± 0.49	2.63 ± 0.25
bn080928628	1.17E-06 ± 3.80E-08	6.02 ± 1.27	5.10 ± 0.51	3.19 ± 0.23
bn081003644	9.00E-06 ± 1.08E-07	5.21 ± 0.96	4.29 ± 0.46	3.07 ± 0.22
bn081006604	8.33E-07 ± 1.90E-08	4.69 ± 1.20	3.28 ± 0.61	1.46 ± 0.25

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn081006872	3.87E-07 ± 2.00E-08	3.93 ± 1.20	3.01 ± 0.57	1.53 ± 0.25
bn081008832	1.03E-05 ± 1.50E-07	5.33 ± 0.79	3.45 ± 0.34	2.66 ± 0.16
bn081009140	3.83E-05 ± 4.50E-08	129.89 ± 2.49	125.99 ± 1.24	117.01 ± 0.62
bn081009690	1.08E-05 ± 7.60E-08	9.35 ± 1.09	6.44 ± 0.48	5.98 ± 0.23
bn081012045	2.29E-07 ± 4.40E-08	6.27 ± 1.23	4.69 ± 0.55	3.33 ± 0.26
bn081012549	4.51E-06 ± 1.12E-07	4.76 ± 0.80	2.62 ± 0.31	2.05 ± 0.13
bn081017474	1.39E-06 ± 2.10E-08	4.63 ± 1.24	4.00 ± 0.57	2.75 ± 0.25
bn081021398	5.74E-06 ± 7.90E-08	5.88 ± 0.95	4.07 ± 0.60	3.53 ± 0.23
bn081022364	1.16E-06 ± 2.90E-08	4.71 ± 1.21	2.83 ± 0.49	2.16 ± 0.23
bn081024245	1.99E-07 ± 1.70E-08	6.80 ± 1.38	4.07 ± 0.66	1.85 ± 0.29
bn081024851	6.27E-06 ± 7.20E-08	4.58 ± 0.89	3.12 ± 0.28	2.37 ± 0.18
bn081024891	3.55E-07 ± 2.90E-08	5.36 ± 0.56	3.45 ± 0.28	2.14 ± 0.14
bn081025349	6.32E-06 ± 1.18E-07	5.10 ± 0.69	4.78 ± 0.36	4.09 ± 0.17
bn081028538	2.27E-06 ± 2.60E-08	8.12 ± 0.94	7.55 ± 0.45	6.34 ± 0.22
bn081101167	1.40E-06 ± 6.20E-08	4.16 ± 1.44	2.39 ± 0.58	1.36 ± 0.24
bn081101491	1.68E-07 ± 4.00E-09	7.97 ± 0.80	4.48 ± 0.37	1.06 ± 0.15
bn081101532	1.51E-05 ± 3.46E-07	12.96 ± 1.29	11.30 ± 0.64	9.75 ± 0.31
bn081102365	1.09E-06 ± 3.20E-08	5.06 ± 0.57	3.87 ± 0.29	2.64 ± 0.14
bn081102739	3.76E-06 ± 9.20E-08	4.47 ± 0.84	3.64 ± 0.34	2.71 ± 0.16
bn081105614	2.75E-07 ± 1.80E-08	7.95 ± 1.02	2.91 ± 0.46	0.81 ± 0.18
bn081107321	1.23E-06 ± 3.20E-08	13.54 ± 0.85	11.98 ± 0.40	9.96 ± 0.19
bn081109293	6.55E-06 ± 5.90E-08	4.37 ± 1.59	3.24 ± 0.20	2.64 ± 0.16
bn081110601	5.41E-06 ± 1.01E-07	21.19 ± 1.19	20.58 ± 0.58	15.38 ± 0.27
bn081113230	3.30E-07 ± 4.30E-08	11.14 ± 0.99	8.14 ± 0.47	3.01 ± 0.18
bn081115891	8.60E-08 ± 1.30E-08	3.75 ± 0.76	2.18 ± 0.38	1.02 ± 0.18
bn081118876	4.94E-06 ± 4.40E-08	9.58 ± 0.88	8.02 ± 0.42	7.29 ± 0.19
bn081119184	1.30E-07 ± 1.80E-08	4.80 ± 1.25	3.29 ± 0.56	1.40 ± 0.23
bn081120618	1.94E-06 ± 2.40E-08	6.27 ± 1.31	5.16 ± 0.61	4.25 ± 0.28
bn081121858	1.53E-05 ± 2.20E-07	12.81 ± 1.66	10.37 ± 0.75	7.72 ± 0.38
bn081122520	7.54E-06 ± 7.90E-08	21.51 ± 1.11	17.92 ± 0.52	12.19 ± 0.24
bn081122614	1.39E-07 ± 8.00E-09	9.21 ± 1.43	7.01 ± 0.52	1.70 ± 0.20
bn081124060	8.59E-06 ± 8.00E-08	21.66 ± 1.20	21.34 ± 0.41	19.78 ± 0.25

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn081125496	1.85E-05 ± 1.33E-07	27.56 ± 1.91	26.38 ± 0.91	23.25 ± 0.43
bn081126899	1.14E-05 ± 6.70E-08	7.77 ± 0.81	7.19 ± 0.39	6.50 ± 0.19
bn081129161	1.62E-05 ± 1.47E-07	19.58 ± 1.38	17.24 ± 0.66	14.30 ± 0.31
bn081130212	2.64E-07 ± 2.00E-08	11.28 ± 1.75	5.13 ± 0.57	2.17 ± 0.23
bn081130629	3.22E-06 ± 5.60E-08	6.17 ± 0.85	5.15 ± 0.41	4.37 ± 0.19
bn081204004	1.02E-06 ± 5.40E-08	5.00 ± 0.66	3.82 ± 0.30	3.01 ± 0.15
bn081204517	3.11E-07 ± 1.70E-08	10.91 ± 0.83	6.66 ± 0.36	1.97 ± 0.13
bn081206275	3.86E-06 ± 6.50E-08	4.28 ± 0.96	3.12 ± 0.35	2.15 ± 0.17
bn081206604	5.00E-07 ± 3.70E-08	3.02 ± 1.06	2.24 ± 0.34	1.90 ± 0.21
bn081206987	1.13E-06 ± 3.50E-08	2.91 ± 0.93	2.32 ± 0.46	1.66 ± 0.19
bn081207680	4.86E-05 ± 9.80E-08	6.22 ± 0.79	5.16 ± 0.37	4.43 ± 0.17
bn081209981	1.47E-06 ± 1.50E-08	25.43 ± 1.21	14.91 ± 0.54	4.28 ± 0.22
bn081213173	1.23E-07 ± 1.90E-08	4.92 ± 0.94	2.98 ± 0.38	0.99 ± 0.16
bn081215784	5.47E-05 ± 5.90E-08	148.47 ± 2.13	122.54 ± 1.00	64.91 ± 0.39
bn081215880	1.78E-06 ± 3.60E-08	7.09 ± 2.33	5.58 ± 0.87	4.56 ± 0.42
bn081216531	2.99E-06 ± 7.70E-08	38.22 ± 1.27	26.99 ± 0.57	8.92 ± 0.21
bn081217983	9.62E-06 ± 1.40E-07	6.90 ± 0.71	6.07 ± 0.34	5.47 ± 0.16
bn081221681	3.00E-05 ± 8.70E-08	27.48 ± 1.36	26.87 ± 0.67	25.43 ± 0.33
bn081222204	1.19E-05 ± 9.60E-08	14.50 ± 1.00	13.75 ± 0.48	12.76 ± 0.23
bn081223419	8.34E-07 ± 3.90E-08	14.73 ± 0.86	12.81 ± 0.42	6.05 ± 0.18
bn081224887	3.76E-05 ± 1.69E-07	26.67 ± 1.15	24.65 ± 0.57	23.85 ± 0.28
bn081225257	6.75E-06 ± 9.00E-08	3.73 ± 0.68	2.73 ± 0.31	2.15 ± 0.15
bn081226044	4.30E-07 ± 2.30E-08	6.23 ± 1.37	5.32 ± 0.72	2.32 ± 0.28
bn081226156	3.95E-06 ± 1.90E-08	6.41 ± 0.86	4.84 ± 0.40	3.74 ± 0.19
bn081226509	3.44E-07 ± 2.70E-08	8.53 ± 0.78	5.60 ± 0.33	1.69 ± 0.13
bn081229187	1.06E-06 ± 7.70E-08	5.00 ± 0.60	4.44 ± 0.29	1.88 ± 0.12
bn081229675	...	...	...	...
bn081230871	1.81E-07 ± 1.60E-08	3.84 ± 0.62	2.24 ± 0.30	1.27 ± 0.15
bn081231140	1.61E-05 ± 1.17E-07	17.44 ± 1.05	15.05 ± 0.50	11.21 ± 0.23
bn090101758	1.23E-05 ± 1.14E-07	14.10 ± 1.24	12.41 ± 0.56	11.66 ± 0.28
bn090102122	2.79E-05 ± 6.10E-08	19.97 ± 0.97	17.20 ± 0.47	11.17 ± 0.21
bn090107681	2.90E-06 ± 1.02E-07	6.84 ± 1.63	5.03 ± 0.60	3.13 ± 0.32

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090108020	7.47E-07 ± 1.70E-08	25.43 ± 1.36	18.64 ± 0.62	7.91 ± 0.25
bn090108322	5.36E-07 ± 1.40E-08	10.33 ± 1.03	7.16 ± 0.42	1.97 ± 0.20
bn090109332	2.09E-07 ± 2.30E-08	4.34 ± 1.17	3.14 ± 0.48	1.83 ± 0.22
bn090112332	3.92E-06 ± 6.80E-08	7.50 ± 1.52	6.53 ± 0.74	6.03 ± 0.30
bn090112729	9.23E-06 ± 1.08E-07	18.12 ± 1.32	16.05 ± 0.63	13.26 ± 0.30
bn090113778	1.57E-06 ± 4.80E-08	6.12 ± 0.71	5.30 ± 0.36	3.77 ± 0.16
bn090117335	1.10E-06 ± 3.50E-08	5.38 ± 1.40	4.37 ± 0.50	3.67 ± 0.27
bn090117632	1.19E-05 ± 1.97E-07	5.71 ± 0.82	3.66 ± 0.40	3.28 ± 0.18
bn090117640	2.53E-06 ± 4.70E-08	16.83 ± 0.95	15.38 ± 0.49	10.22 ± 0.21
bn090120627	7.68E-07 ± 2.10E-08	4.66 ± 0.77	2.92 ± 0.30	1.84 ± 0.15
bn090126227	1.10E-06 ± 2.00E-08	5.52 ± 0.78	4.48 ± 0.38	4.02 ± 0.18
bn090126245	3.58E-07 ± 1.90E-08	3.59 ± 0.48	2.10 ± 0.23	1.37 ± 0.11
bn090129880	5.57E-06 ± 6.20E-08	9.78 ± 1.01	7.14 ± 0.43	6.60 ± 0.22
bn090131090	1.75E-05 ± 6.60E-08	59.41 ± 1.95	55.09 ± 0.94	40.31 ± 0.42
bn090202347	4.95E-06 ± 3.10E-08	7.28 ± 0.84	6.43 ± 0.40	5.75 ± 0.21
bn090206620	7.15E-07 ± 1.20E-08	12.70 ± 1.07	8.48 ± 0.53	2.55 ± 0.21
bn090207777	2.41E-06 ± 4.20E-08	3.67 ± 1.06	3.38 ± 0.53	2.79 ± 0.22
bn090213236	1.10E-06 ± 5.80E-08	3.67 ± 1.40	2.16 ± 0.44	1.26 ± 0.22
bn090217206	2.75E-05 ± 3.20E-08	13.06 ± 1.05	10.91 ± 0.52	9.74 ± 0.25
bn090219074	2.12E-07 ± 5.40E-08	11.66 ± 3.09	6.88 ± 1.42	3.18 ± 0.60
bn090222179	3.23E-06 ± 5.40E-08	4.93 ± 0.85	3.61 ± 0.38	3.01 ± 0.17
bn090225009	1.54E-07 ± 1.50E-08	4.64 ± 1.53	3.48 ± 0.38	1.44 ± 0.28
bn090227310	2.86E-06 ± 2.10E-08	6.67 ± 1.21	4.68 ± 0.48	3.94 ± 0.27
bn090227772	7.86E-06 ± 4.10E-08	113.03 ± 14.14	59.40 ± 3.62	16.98 ± 0.93
bn090228204	6.19E-06 ± 2.60E-08	134.01 ± 2.74	54.58 ± 0.96	16.89 ± 0.32
bn090228976	9.64E-07 ± 6.60E-08	3.94 ± 1.21	2.96 ± 0.46	2.28 ± 0.24
bn090301315	2.27E-06 ± 3.80E-08	5.01 ± 0.81	4.07 ± 0.38	3.72 ± 0.18
bn090304216	8.99E-07 ± 1.02E-07	3.40 ± 0.52	2.74 ± 0.36	1.91 ± 0.16
bn090305052	1.94E-06 ± 1.30E-08	9.05 ± 0.58	8.04 ± 0.29	5.20 ± 0.15
bn090306245	1.37E-06 ± 3.70E-08	3.59 ± 0.98	2.21 ± 0.45	1.72 ± 0.22
bn090307167	1.09E-06 ± 3.70E-08	3.97 ± 1.36	2.66 ± 0.44	1.41 ± 0.24
bn090308734	2.55E-06 ± 2.90E-08	12.33 ± 0.71	8.50 ± 0.36	6.56 ± 0.17

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090309767	4.42E-06 ± 6.90E-08	5.19 ± 1.81	4.45 ± 0.44	3.46 ± 0.21
bn090310189	5.54E-06 ± 6.20E-08	5.27 ± 0.94	4.16 ± 0.41	3.43 ± 0.20
bn090316311	1.06E-06 ± 2.20E-08	10.32 ± 1.28	7.60 ± 0.71	3.79 ± 0.31
bn090319622	6.03E-06 ± 6.50E-08	5.81 ± 1.37	4.37 ± 0.63	3.57 ± 0.28
bn090320045	4.45E-07 ± 2.30E-08	2.80 ± 0.65	1.87 ± 0.27	1.42 ± 0.13
bn090320418	1.01E-06 ± 3.90E-08	4.17 ± 0.80	2.15 ± 0.31	1.60 ± 0.14
bn090320801	1.67E-06 ± 6.20E-08	6.10 ± 1.39	4.98 ± 0.43	4.36 ± 0.25
bn090323002	1.18E-04 ± 1.74E-07	14.33 ± 0.84	13.38 ± 0.44	12.65 ± 0.22
bn090326633	1.70E-06 ± 6.40E-08	7.15 ± 1.03	5.80 ± 0.45	4.90 ± 0.22
bn090327404	2.82E-06 ± 6.10E-08	4.64 ± 0.79	3.66 ± 0.36	3.04 ± 0.18
bn090328401	4.20E-05 ± 6.50E-08	25.35 ± 1.50	21.95 ± 0.70	17.23 ± 0.33
bn090328713	1.19E-07 ± 1.80E-08	17.35 ± 1.45	8.17 ± 0.59	1.97 ± 0.22
bn090330279	1.18E-05 ± 4.10E-08	7.49 ± 0.85	6.35 ± 0.36	5.54 ± 0.18
bn090331681	3.45E-07 ± 3.50E-08	7.19 ± 0.82	4.01 ± 0.35	1.97 ± 0.16
bn090403314	1.09E-06 ± 1.90E-08	3.02 ± 1.08	2.43 ± 0.42	1.82 ± 0.21
bn090405663	2.54E-07 ± 3.10E-08	6.73 ± 1.08	3.91 ± 0.45	1.16 ± 0.18
bn090409288	1.13E-06 ± 5.90E-08	3.69 ± 0.79	2.11 ± 0.27	1.60 ± 0.14
bn090411838	6.67E-06 ± 1.03E-07	8.77 ± 1.06	6.96 ± 0.49	5.24 ± 0.23
bn090411991	6.21E-06 ± 8.80E-08	7.96 ± 1.11	6.34 ± 0.55	4.72 ± 0.25
bn090412061	1.25E-07 ± 1.40E-08	4.12 ± 1.20	3.29 ± 0.50	0.87 ± 0.20
bn090413122	3.23E-06 ± 4.90E-08	4.42 ± 0.64	3.90 ± 0.34	3.04 ± 0.17
bn090418816	1.82E-07 ± 3.30E-08	5.88 ± 1.27	3.60 ± 0.54	1.68 ± 0.24
bn090419997	9.54E-06 ± 2.38E-07	5.77 ± 0.83	4.68 ± 0.38	4.13 ± 0.18
bn090422150	4.59E-07 ± 3.40E-08	4.94 ± 1.31	3.74 ± 0.50	2.37 ± 0.24
bn090423330	8.16E-07 ± 7.10E-08	4.24 ± 1.22	2.30 ± 0.48	1.62 ± 0.21
bn090424592	4.63E-05 ± 3.90E-08	126.67 ± 2.04	121.25 ± 0.99	109.51 ± 0.49
bn090425377	1.81E-05 ± 1.52E-07	18.63 ± 1.65	17.15 ± 0.89	13.88 ± 0.42
bn090426066	6.77E-07 ± 4.40E-08	3.21 ± 0.86	2.63 ± 0.41	2.03 ± 0.18
bn090426690	3.54E-06 ± 8.80E-08	9.16 ± 0.86	7.13 ± 0.41	6.31 ± 0.19
bn090427644	2.65E-07 ± 2.20E-08	2.97 ± 0.82	2.30 ± 0.33	1.71 ± 0.15
bn090427688	1.62E-06 ± 3.20E-08	5.03 ± 1.09	3.59 ± 0.52	2.55 ± 0.24
bn090428441	1.04E-06 ± 6.30E-08	9.21 ± 1.05	8.44 ± 0.52	6.29 ± 0.25

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090428552	5.60E-06 ± 1.24E-07	9.87 ± 1.16	8.74 ± 0.48	7.61 ± 0.24
bn090429530	4.36E-06 ± 1.38E-07	6.44 ± 1.07	4.02 ± 0.49	3.28 ± 0.22
bn090429753	1.12E-06 ± 4.30E-08	8.62 ± 0.83	7.53 ± 0.35	3.90 ± 0.15
bn090502777	3.50E-06 ± 2.90E-08	8.79 ± 1.58	6.89 ± 0.70	5.28 ± 0.33
bn090509215	5.42E-06 ± 7.40E-08	3.86 ± 0.87	2.79 ± 0.32	2.32 ± 0.17
bn090510016	3.37E-06 ± 4.10E-08	40.95 ± 1.58	22.99 ± 0.75	9.10 ± 0.24
bn090510325	5.60E-07 ± 2.80E-08	3.14 ± 1.21	2.52 ± 0.42	1.81 ± 0.25
bn090511684	2.49E-06 ± 8.50E-08	5.56 ± 0.80	4.30 ± 0.40	3.46 ± 0.19
bn090513916	4.94E-06 ± 1.77E-07	4.87 ± 1.03	3.53 ± 0.41	2.12 ± 0.17
bn090513941	1.04E-06 ± 3.00E-08	5.21 ± 1.86	3.99 ± 0.75	2.40 ± 0.36
bn090514006	6.46E-06 ± 1.07E-07	7.80 ± 0.80	7.04 ± 0.42	6.01 ± 0.20
bn090514726	2.25E-06 ± 3.10E-08	13.46 ± 1.12	12.24 ± 0.57	7.98 ± 0.26
bn090514734	9.55E-06 ± 2.10E-07	6.88 ± 1.15	6.50 ± 0.32	4.56 ± 0.22
bn090516137	1.68E-05 ± 1.85E-07	4.58 ± 0.84	3.65 ± 0.33	3.02 ± 0.17
bn090516353	1.72E-05 ± 5.60E-08	7.54 ± 1.10	5.14 ± 0.40	4.41 ± 0.22
bn090516853	5.00E-06 ± 9.60E-08	10.02 ± 1.07	9.28 ± 0.49	7.98 ± 0.24
bn090518080	9.91E-07 ± 2.70E-08	9.75 ± 5.05	5.68 ± 0.67	4.75 ± 0.31
bn090518244	2.11E-06 ± 6.80E-08	7.10 ± 1.02	5.96 ± 0.45	4.96 ± 0.22
bn090519462	4.38E-06 ± 5.10E-08	6.53 ± 1.10	4.37 ± 0.45	2.57 ± 0.18
bn090519881	5.73E-06 ± 6.10E-08	3.45 ± 0.96	2.31 ± 0.32	1.49 ± 0.16
bn090520832	2.32E-07 ± 2.50E-08	5.76 ± 1.01	3.83 ± 0.43	2.03 ± 0.19
bn090520850	3.32E-06 ± 1.04E-07	9.53 ± 1.06	6.74 ± 0.43	5.23 ± 0.21
bn090520876	6.18E-06 ± 3.90E-08	10.80 ± 1.06	9.41 ± 0.46	8.80 ± 0.23
bn090522344	2.13E-06 ± 4.90E-08	6.06 ± 0.81	4.18 ± 0.42	3.48 ± 0.20
bn090524346	1.66E-05 ± 6.10E-08	14.50 ± 0.93	14.08 ± 0.45	12.97 ± 0.22
bn090528173	6.57E-06 ± 1.14E-07	7.67 ± 0.89	5.54 ± 0.43	4.75 ± 0.20
bn090528516	4.35E-05 ± 8.90E-08	19.32 ± 0.94	17.28 ± 0.45	12.76 ± 0.21
bn090529310	8.34E-07 ± 3.70E-08	5.71 ± 0.75	3.68 ± 0.31	3.28 ± 0.16
bn090529564	8.69E-06 ± 3.30E-08	30.71 ± 1.19	27.27 ± 0.58	22.56 ± 0.27
bn090530760	5.99E-05 ± 1.60E-07	12.75 ± 1.12	11.78 ± 0.51	10.70 ± 0.24
bn090531775	3.18E-07 ± 1.80E-08	5.92 ± 1.15	4.02 ± 0.47	3.40 ± 0.25
bn090602564	2.79E-06 ± 5.70E-08	5.07 ± 1.47	3.64 ± 0.52	2.51 ± 0.32

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090606471	9.46E-07 ± 8.70E-08	5.79 ± 1.80	2.51 ± 0.48	1.60 ± 0.22
bn090608052	1.25E-06 ± 1.80E-08	4.32 ± 0.82	2.99 ± 0.36	2.25 ± 0.17
bn090610648	1.35E-06 ± 5.60E-08	4.60 ± 0.74	3.41 ± 0.33	2.95 ± 0.15
bn090610723	3.96E-06 ± 6.10E-08	3.82 ± 1.46	3.01 ± 0.51	2.22 ± 0.26
bn090610883	7.64E-07 ± 2.20E-08	4.34 ± 1.32	2.98 ± 0.52	2.08 ± 0.27
bn090612619	5.82E-06 ± 7.50E-08	7.78 ± 1.03	6.47 ± 0.47	6.05 ± 0.23
bn090616157	4.13E-07 ± 2.30E-08	4.06 ± 0.72	3.55 ± 0.33	2.62 ± 0.15
bn090617208	9.43E-07 ± 1.70E-08	18.94 ± 0.81	11.20 ± 0.38	2.93 ± 0.14
bn090618353	2.68E-04 ± 4.29E-07	76.16 ± 4.75	72.00 ± 2.32	68.72 ± 1.14
bn090620400	1.33E-05 ± 4.30E-08	19.08 ± 1.30	17.66 ± 0.59	15.43 ± 0.29
bn090620901	4.31E-07 ± 3.20E-08	3.93 ± 0.71	2.78 ± 0.35	2.08 ± 0.14
bn090621185	1.08E-05 ± 2.11E-07	5.96 ± 0.86	4.52 ± 0.42	3.63 ± 0.19
bn090621417	3.82E-06 ± 1.10E-07	6.45 ± 0.80	4.64 ± 0.37	3.67 ± 0.37
bn090621447	1.57E-06 ± 5.20E-08	5.71 ± 1.16	3.75 ± 0.49	2.84 ± 0.22
bn090621922	4.76E-07 ± 1.90E-08	9.79 ± 1.50	5.58 ± 0.69	2.02 ± 0.28
bn090623107	1.18E-05 ± 7.10E-08	8.53 ± 0.75	8.16 ± 0.38	6.22 ± 0.18
bn090623913	2.16E-06 ± 5.50E-08	5.41 ± 1.30	4.10 ± 0.47	3.60 ± 0.24
bn090625234	1.35E-06 ± 1.30E-08	3.68 ± 2.08	2.11 ± 0.57	1.43 ± 0.13
bn090625560	2.46E-06 ± 8.70E-08	6.22 ± 1.37	4.13 ± 0.56	3.44 ± 0.26
bn090626189	6.30E-05 ± 1.07E-07	53.30 ± 2.86	44.46 ± 1.34	34.25 ± 0.64
bn090626707	...	...	...	...
bn090629543	4.39E-07 ± 2.50E-08	3.11 ± 0.92	2.20 ± 0.40	1.07 ± 0.21
bn090630311	1.08E-06 ± 1.30E-08	7.65 ± 0.83	6.86 ± 0.42	6.19 ± 0.21
bn090701225	4.42E-07 ± 1.60E-08	5.38 ± 0.81	4.54 ± 0.40	3.14 ± 0.18
bn090703329	8.46E-07 ± 2.90E-08	3.79 ± 1.12	3.08 ± 0.34	2.46 ± 0.21
bn090704242	8.48E-06 ± 1.00E-07	5.69 ± 1.88	3.58 ± 0.47	2.57 ± 0.21
bn090704783	1.58E-06 ± 4.40E-08	5.12 ± 1.26	3.52 ± 0.58	3.03 ± 0.26
bn090706283	7.47E-06 ± 7.60E-08	6.40 ± 1.77	4.15 ± 0.52	3.07 ± 0.24
bn090708152	1.01E-06 ± 2.80E-08	3.33 ± 0.94	1.83 ± 0.38	1.37 ± 0.16
bn090709630	2.21E-06 ± 3.90E-08	5.11 ± 0.75	4.08 ± 0.33	3.39 ± 0.15
bn090711850	5.79E-06 ± 1.31E-07	5.84 ± 1.03	4.62 ± 0.46	3.60 ± 0.21
bn090712160	7.60E-06 ± 2.59E-07	3.82 ± 0.82	2.05 ± 0.34	1.60 ± 0.15

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090713020	9.48E-06 ± 4.40E-08	5.43 ± 0.88	4.30 ± 0.41	3.30 ± 0.17
bn090717034	2.32E-05 ± 7.50E-08	19.76 ± 1.01	19.12 ± 0.50	16.53 ± 0.24
bn090717111	3.08E-07 ± 2.60E-08	4.18 ± 0.80	3.19 ± 0.30	1.61 ± 0.13
bn090718720	3.32E-06 ± 4.40E-08	5.42 ± 1.34	2.58 ± 0.44	1.73 ± 0.20
bn090718762	2.50E-05 ± 1.19E-07	32.18 ± 1.33	30.80 ± 0.68	28.99 ± 0.33
bn090719063	4.68E-05 ± 1.58E-07	41.57 ± 1.61	39.10 ± 0.79	37.81 ± 0.39
bn090720276	3.22E-06 ± 2.90E-08	14.07 ± 1.45	11.28 ± 0.66	10.18 ± 0.31
bn090720710	1.42E-05 ± 2.40E-08	34.19 ± 1.53	29.83 ± 0.71	9.91 ± 0.24
bn090725838	2.36E-06 ± 4.70E-08	5.74 ± 1.13	4.80 ± 0.47	4.00 ± 0.24
bn090726218	5.22E-07 ± 2.10E-08	3.07 ± 0.93	1.98 ± 0.31	1.31 ± 0.20
bn090730608	3.18E-06 ± 7.50E-08	6.58 ± 0.88	5.63 ± 0.41	4.88 ± 0.19
bn090802235	1.14E-06 ± 3.60E-08	35.46 ± 1.75	21.08 ± 0.58	5.49 ± 0.20
bn090802666	2.77E-06 ± 6.80E-08	6.27 ± 1.05	6.27 ± 0.26	3.65 ± 0.19
bn090804940	1.44E-05 ± 1.86E-07	40.69 ± 1.68	38.27 ± 0.80	36.65 ± 0.41
bn090805622	5.79E-06 ± 5.00E-08	7.36 ± 1.62	5.87 ± 0.73	4.52 ± 0.36
bn090807832	1.34E-06 ± 2.50E-08	15.82 ± 1.31	13.76 ± 0.63	9.31 ± 0.28
bn090809978	2.16E-05 ± 1.28E-07	24.93 ± 1.16	23.81 ± 0.59	22.96 ± 0.29
bn090810659	9.89E-06 ± 8.70E-08	10.06 ± 1.65	8.40 ± 0.72	7.45 ± 0.33
bn090810781	5.15E-06 ± 5.70E-08	6.84 ± 1.00	4.38 ± 0.45	3.41 ± 0.20
bn090811696	1.05E-06 ± 2.20E-08	5.07 ± 1.11	3.46 ± 0.41	2.22 ± 0.20
bn090813174	3.33E-06 ± 4.20E-08	24.15 ± 1.10	19.30 ± 0.53	13.64 ± 0.25
bn090814368	8.90E-07 ± 6.00E-09	11.43 ± 0.63	8.96 ± 0.32	2.42 ± 0.12
bn090814950	1.60E-05 ± 3.87E-07	6.58 ± 0.96	5.04 ± 0.44	4.29 ± 0.21
bn090815300	1.43E-06 ± 4.40E-08	4.50 ± 1.47	2.67 ± 0.51	1.59 ± 0.26
bn090815438	4.90E-06 ± 1.60E-07	14.18 ± 1.17	11.80 ± 0.50	11.36 ± 0.28
bn090815946	2.88E-06 ± 2.80E-08	3.30 ± 1.01	2.14 ± 0.41	1.47 ± 0.19
bn090817036	4.61E-06 ± 1.07E-07	5.50 ± 1.28	4.51 ± 0.55	3.62 ± 0.30
bn090819607	2.72E-07 ± 1.90E-08	7.26 ± 0.70	4.37 ± 0.32	1.05 ± 0.13
bn090820027	1.54E-04 ± 1.84E-07	135.43 ± 2.98	129.48 ± 1.46	124.84 ± 0.72
bn090820509	1.34E-06 ± 3.80E-08	10.21 ± 0.82	8.77 ± 0.42	5.93 ± 0.21
bn090823133	2.54E-06 ± 5.00E-08	4.96 ± 1.30	3.13 ± 0.45	2.77 ± 0.21
bn090824918	3.65E-06 ± 7.50E-08	9.78 ± 2.61	5.18 ± 0.83	3.27 ± 0.30

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090826068	8.48E-07 ± 4.10E-08	4.75 ± 0.69	3.34 ± 0.32	2.82 ± 0.16
bn090828099	2.37E-05 ± 1.86E-07	16.48 ± 1.20	15.36 ± 0.61	14.54 ± 0.30
bn090829672	7.66E-05 ± 1.58E-07	58.57 ± 1.35	52.24 ± 0.66	44.21 ± 0.32
bn090829702	4.81E-06 ± 5.60E-08	3.89 ± 0.78	3.23 ± 0.35	2.59 ± 0.15
bn090831317	9.45E-06 ± 7.30E-08	38.23 ± 1.56	21.56 ± 0.68	7.12 ± 0.26
bn090902401	1.67E-06 ± 4.30E-08	8.04 ± 1.16	6.23 ± 0.54	4.56 ± 0.26
bn090902462	2.22E-04 ± 3.17E-07	100.37 ± 1.92	88.58 ± 0.93	76.89 ± 0.44
bn090904058	2.17E-05 ± 2.21E-07	10.60 ± 1.87	8.70 ± 0.81	6.77 ± 0.41
bn090904581	1.64E-06 ± 2.80E-08	3.44 ± 1.05	2.13 ± 0.67	1.42 ± 0.24
bn090907017	4.54E-06 ± 8.70E-08	6.95 ± 1.49	3.59 ± 0.52	2.83 ± 0.23
bn090907808	1.05E-06 ± 2.40E-08	7.94 ± 0.91	6.99 ± 0.45	4.66 ± 0.21
bn090908314	3.85E-06 ± 9.40E-08	5.13 ± 1.10	3.92 ± 0.47	3.47 ± 0.23
bn090908341	2.60E-06 ± 1.60E-08	5.87 ± 0.71	3.28 ± 0.35	2.15 ± 0.16
bn090909487	5.73E-06 ± 1.97E-07	13.88 ± 4.43	7.85 ± 1.74	5.84 ± 0.80
bn090909854	1.57E-07 ± 2.20E-08	6.36 ± 1.18	3.45 ± 0.51	1.80 ± 0.22
bn090910812	1.87E-05 ± 2.12E-07	7.68 ± 1.61	7.15 ± 0.77	5.05 ± 0.35
bn090912660	1.04E-05 ± 1.73E-07	4.57 ± 0.92	2.74 ± 0.38	2.09 ± 0.17
bn090915650	2.99E-06 ± 4.40E-08	5.03 ± 1.04	3.58 ± 0.41	2.83 ± 0.20
bn090917661	1.08E-06 ± 3.80E-08	4.47 ± 1.27	3.36 ± 0.53	2.71 ± 0.25
bn090920035	3.74E-06 ± 3.80E-08	8.49 ± 3.02	5.92 ± 0.74	4.57 ± 0.33
bn090922539	1.10E-05 ± 5.00E-08	16.66 ± 1.00	16.18 ± 0.50	14.65 ± 0.24
bn090922605	4.51E-06 ± 1.03E-07	12.49 ± 3.09	10.21 ± 1.39	4.82 ± 0.64
bn090924625	5.55E-07 ± 3.00E-08	9.12 ± 0.82	5.17 ± 0.34	1.48 ± 0.15
bn090925389	8.91E-06 ± 3.13E-07	7.76 ± 1.53	5.82 ± 0.61	4.56 ± 0.25
bn090926181	1.47E-04 ± 3.41E-07	135.54 ± 2.01	106.69 ± 0.90	81.45 ± 0.37
bn090926914	1.08E-05 ± 1.49E-07	6.31 ± 1.00	5.33 ± 0.47	4.61 ± 0.22
bn090927422	3.03E-07 ± 1.80E-08	6.54 ± 1.09	5.42 ± 0.59	3.32 ± 0.24
bn090928646	1.95E-06 ± 7.00E-08	7.43 ± 2.47	5.88 ± 0.65	4.68 ± 0.30
bn090929190	8.18E-06 ± 9.50E-08	30.22 ± 1.98	25.96 ± 0.94	16.73 ± 0.41
bn091002685	3.37E-07 ± 1.50E-08	3.65 ± 0.62	3.28 ± 0.37	2.45 ± 0.17
bn091003191	2.33E-05 ± 7.80E-08	46.63 ± 2.21	41.55 ± 1.07	29.16 ± 0.50
bn091005679	1.41E-06 ± 7.20E-08	3.56 ± 0.73	3.04 ± 0.34	2.18 ± 0.14

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn091006360	1.14E-07 ± 1.70E-08	5.34 ± 1.24	4.87 ± 0.61	1.70 ± 0.21
bn091010113	9.96E-06 ± 5.90E-08	73.03 ± 1.87	66.14 ± 0.88	40.30 ± 0.39
bn091012783	2.12E-06 ± 4.40E-08	18.43 ± 1.99	13.95 ± 0.95	8.35 ± 0.40
bn091015129	1.59E-06 ± 5.50E-08	11.86 ± 4.10	9.88 ± 0.75	6.38 ± 0.59
bn091017861	4.50E-07 ± 1.40E-08	4.27 ± 1.33	3.89 ± 0.33	3.32 ± 0.26
bn091017985	2.15E-06 ± 3.30E-08	3.98 ± 1.51	3.39 ± 0.39	2.13 ± 0.22
bn091018957	1.81E-07 ± 2.90E-08	10.23 ± 2.68	6.68 ± 1.13	2.24 ± 0.42
bn091019750	9.10E-08 ± 6.00E-09	7.61 ± 0.69	2.37 ± 0.28	0.65 ± 0.13
bn091020900	8.35E-06 ± 1.50E-07	10.30 ± 1.27	7.84 ± 0.56	6.77 ± 0.27
bn091020977	1.07E-05 ± 6.10E-08	8.08 ± 0.72	7.06 ± 0.32	5.95 ± 0.15
bn091023021	5.34E-07 ± 2.20E-08	7.58 ± 1.57	5.45 ± 0.70	4.30 ± 0.31
bn091024372	8.56E-06 ± 6.00E-08	5.65 ± 1.16	5.11 ± 0.59	4.23 ± 0.33
bn091024380	2.55E-05 ± 4.80E-08	6.60 ± 1.42	4.35 ± 0.59	3.46 ± 0.26
bn091026485	5.67E-07 ± 2.40E-08	4.96 ± 0.96	3.88 ± 0.47	2.70 ± 0.21
bn091026550	1.38E-06 ± 7.20E-08	8.67 ± 2.40	5.51 ± 1.11	3.86 ± 0.49
bn091030613	4.48E-06 ± 4.20E-08	5.75 ± 0.92	4.40 ± 0.41	3.80 ± 0.20
bn091030828	2.96E-05 ± 2.02E-07	11.96 ± 0.92	10.92 ± 0.46	9.40 ± 0.22
bn091031500	1.53E-05 ± 8.60E-08	9.89 ± 0.88	8.39 ± 0.44	7.19 ± 0.22
bn091101143	7.84E-06 ± 7.90E-08	16.46 ± 1.26	13.99 ± 0.57	12.27 ± 0.28
bn091102607	1.88E-06 ± 1.07E-07	6.58 ± 0.91	3.89 ± 0.41	2.94 ± 0.20
bn091103912	5.61E-06 ± 1.09E-07	8.73 ± 0.96	7.72 ± 0.46	6.46 ± 0.22
bn091106762	1.83E-06 ± 7.70E-08	7.72 ± 1.60	4.46 ± 0.72	2.98 ± 0.33
bn091107635	9.33E-07 ± 4.00E-08	5.25 ± 1.11	4.43 ± 0.56	3.62 ± 0.25
bn091109895	2.02E-06 ± 4.20E-08	10.84 ± 1.31	9.42 ± 0.63	6.22 ± 0.29
bn091112737	9.90E-06 ± 8.90E-08	5.74 ± 0.86	5.09 ± 0.40	4.17 ± 0.19
bn091112928	4.57E-06 ± 4.60E-08	5.87 ± 0.87	3.66 ± 0.38	2.93 ± 0.17
bn091115177	1.54E-06 ± 5.80E-08	3.30 ± 0.97	2.09 ± 0.28	1.45 ± 0.17
bn091117080	3.68E-06 ± 4.20E-08	6.29 ± 1.96	3.40 ± 0.58	2.64 ± 0.32
bn091120191	2.85E-05 ± 4.09E-07	26.85 ± 1.18	25.04 ± 0.56	19.70 ± 0.26
bn091122163	1.10E-07 ± 3.40E-08	3.06 ± 1.03	2.68 ± 0.44	1.60 ± 0.22
bn091123081	2.13E-06 ± 8.80E-08	5.76 ± 1.48	4.93 ± 0.61	4.09 ± 0.33
bn091123298	6.40E-05 ± 3.68E-07	10.07 ± 1.19	8.89 ± 0.56	6.18 ± 0.25

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn091126333	3.54E-07 ± 3.60E-08	9.99 ± 0.92	7.49 ± 0.42	1.90 ± 0.16
bn091126389	...	...	...	...
bn091127976	2.07E-05 ± 3.70E-08	102.97 ± 2.21	97.54 ± 1.10	68.22 ± 0.47
bn091128285	4.04E-05 ± 4.45E-07	14.78 ± 1.26	11.86 ± 0.59	9.71 ± 0.27
bn091201089	9.43E-07 ± 2.10E-08	3.96 ± 0.65	2.09 ± 0.20	1.48 ± 0.11
bn091202072	1.67E-06 ± 3.30E-08	4.67 ± 0.86	3.46 ± 0.37	2.75 ± 0.18
bn091202219	6.80E-06 ± 1.51E-07	5.60 ± 0.89	3.98 ± 0.29	3.34 ± 0.18
bn091207333	5.37E-06 ± 1.15E-07	6.83 ± 0.89	4.30 ± 0.38	3.46 ± 0.18
bn091208410	6.19E-06 ± 1.90E-07	31.01 ± 1.43	27.96 ± 0.68	20.58 ± 0.32
bn091209001	1.00E-05 ± 1.92E-07	10.32 ± 2.21	7.07 ± 0.97	5.99 ± 0.44
bn091215234	9.87E-07 ± 1.20E-08	5.09 ± 1.42	4.14 ± 0.67	2.81 ± 0.30
bn091219462	8.53E-07 ± 2.60E-08	5.91 ± 1.16	5.21 ± 0.60	4.12 ± 0.27
bn091220442	5.83E-06 ± 4.50E-08	11.61 ± 1.07	9.92 ± 0.53	8.69 ± 0.25
bn091221870	8.94E-06 ± 2.21E-07	7.00 ± 0.73	5.49 ± 0.36	4.35 ± 0.16
bn091223191	2.79E-07 ± 4.00E-09	3.58 ± 0.61	3.17 ± 0.29	1.76 ± 0.14
bn091223511	8.69E-06 ± 5.50E-08	4.74 ± 0.81	3.08 ± 0.28	2.28 ± 0.15
bn091224373	3.44E-07 ± 1.40E-08	6.39 ± 0.87	3.47 ± 0.38	1.27 ± 0.15
bn091227294	6.89E-06 ± 1.10E-07	7.47 ± 0.89	5.11 ± 0.38	4.14 ± 0.19
bn091230260	1.95E-06 ± 4.20E-08	3.02 ± 0.91	1.40 ± 0.30	0.87 ± 0.14
bn091230712	2.58E-06 ± 8.70E-08	6.39 ± 1.22	3.54 ± 0.49	2.76 ± 0.23
bn091231206	9.76E-06 ± 2.10E-07	6.64 ± 0.98	4.38 ± 0.42	3.83 ± 0.19
bn091231540	7.09E-07 ± 2.70E-08	3.36 ± 1.11	2.56 ± 0.45	1.88 ± 0.23
bn100101028	1.19E-06 ± 5.50E-08	5.83 ± 1.91	3.46 ± 0.85	1.64 ± 0.30
bn100101988	1.87E-06 ± 8.10E-08	3.14 ± 0.43	2.81 ± 0.24	2.08 ± 0.12
bn100107074	1.68E-07 ± 2.10E-08	11.72 ± 1.49	3.11 ± 0.50	1.37 ± 0.23
bn100111176	1.15E-06 ± 2.20E-08	4.74 ± 0.91	4.04 ± 0.37	2.75 ± 0.16
bn100112418	1.05E-06 ± 1.10E-08	3.84 ± 1.22	3.16 ± 0.48	2.11 ± 0.22
bn100116897	3.34E-05 ± 1.63E-07	18.02 ± 0.95	16.48 ± 0.46	15.87 ± 0.23
bn100117879	4.23E-07 ± 6.90E-08	7.95 ± 0.86	5.76 ± 0.39	1.59 ± 0.13
bn100118100	1.44E-06 ± 1.08E-07	5.70 ± 0.97	4.00 ± 0.43	3.20 ± 0.17
bn100122616	1.20E-05 ± 1.61E-07	52.82 ± 1.98	47.69 ± 0.90	44.28 ± 0.44
bn100126460	1.03E-06 ± 5.80E-08	3.82 ± 0.82	3.16 ± 0.43	1.60 ± 0.17

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn100130729	8.57E-06 ± 9.30E-08	7.65 ± 0.87	6.15 ± 0.40	5.49 ± 0.20
bn100130777	1.39E-05 ± 1.71E-07	5.73 ± 0.88	4.47 ± 0.42	3.49 ± 0.20
bn100131730	7.34E-06 ± 7.60E-08	36.51 ± 2.35	31.19 ± 1.09	24.34 ± 0.51
bn100201588	1.07E-05 ± 6.10E-08	4.48 ± 0.84	3.81 ± 0.40	2.98 ± 0.18
bn100204024	1.03E-05 ± 1.55E-07	5.47 ± 0.69	4.75 ± 0.34	4.11 ± 0.17
bn100204566	3.78E-06 ± 4.70E-08	5.89 ± 1.26	4.21 ± 0.64	3.09 ± 0.26
bn100204858	3.15E-07 ± 2.60E-08	3.85 ± 0.86	2.74 ± 0.33	1.27 ± 0.15
bn100205490	1.37E-06 ± 2.90E-08	5.03 ± 1.00	3.61 ± 0.36	3.11 ± 0.18
bn100206563	8.69E-07 ± 1.90E-08	25.23 ± 0.98	11.30 ± 0.40	2.62 ± 0.14
bn100207665	2.08E-06 ± 3.70E-08	4.39 ± 1.00	3.16 ± 0.45	1.88 ± 0.18
bn100207721	4.34E-07 ± 2.30E-08	3.09 ± 0.73	1.71 ± 0.33	1.06 ± 0.15
bn100208386	1.81E-07 ± 1.50E-08	3.48 ± 0.80	2.37 ± 0.60	0.62 ± 0.22
bn100210101	2.11E-06 ± 3.00E-08	4.59 ± 0.86	3.55 ± 0.39	3.23 ± 0.17
bn100211440	1.52E-05 ± 1.67E-07	14.00 ± 1.71	12.15 ± 0.83	11.16 ± 0.39
bn100212550	3.60E-06 ± 9.20E-08	4.91 ± 0.53	4.60 ± 0.32	3.67 ± 0.16
bn100212588	3.46E-07 ± 1.60E-08	4.87 ± 0.98	3.55 ± 0.45	2.98 ± 0.21
bn100216422	3.88E-07 ± 1.50E-08	9.00 ± 1.20	4.87 ± 0.47	1.29 ± 0.19
bn100218194	2.64E-06 ± 9.90E-08	3.66 ± 0.86	2.28 ± 0.34	1.41 ± 0.14
bn100219026	3.48E-06 ± 7.00E-08	6.36 ± 1.21	3.29 ± 0.48	1.92 ± 0.22
bn100221368	1.83E-06 ± 3.10E-08	3.57 ± 0.73	2.54 ± 0.34	1.77 ± 0.14
bn100223110	1.50E-06 ± 1.10E-08	18.61 ± 1.90	11.22 ± 0.58	3.09 ± 0.20
bn100224112	1.07E-05 ± 3.69E-07	13.82 ± 1.26	12.44 ± 0.58	10.87 ± 0.30
bn100225115	5.86E-06 ± 8.20E-08	5.30 ± 0.62	4.37 ± 0.29	3.82 ± 0.15
bn100225249	5.96E-07 ± 6.00E-08	7.28 ± 2.37	2.91 ± 0.65	1.48 ± 0.37
bn100225580	6.40E-06 ± 1.10E-07	14.05 ± 0.87	13.36 ± 0.43	11.62 ± 0.21
bn100225703	1.61E-06 ± 4.00E-08	4.25 ± 0.66	3.18 ± 0.28	2.69 ± 0.14
bn100228544	2.77E-06 ± 5.00E-08	5.02 ± 0.77	2.78 ± 0.36	1.69 ± 0.16
bn100228873	6.91E-07 ± 1.80E-08	4.27 ± 0.85	3.00 ± 0.37	2.46 ± 0.17
bn100301068	2.84E-07 ± 1.40E-08	9.15 ± 1.05	4.62 ± 0.46	1.71 ± 0.20
bn100301223	2.40E-06 ± 6.10E-08	5.28 ± 0.86	4.36 ± 0.40	3.41 ± 0.19
bn100304004	6.31E-06 ± 1.41E-07	8.08 ± 1.61	5.37 ± 0.72	3.65 ± 0.31
bn100304534	4.90E-06 ± 1.59E-07	7.93 ± 1.28	5.12 ± 0.62	4.08 ± 0.28

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn100306199	5.68E-07 ± 2.20E-08	4.24 ± 1.21	1.76 ± 0.45	1.32 ± 0.20
bn100307928	1.54E-06 ± 2.20E-08	4.72 ± 0.86	3.60 ± 0.37	3.05 ± 0.18
bn100311518	2.57E-06 ± 9.90E-08	4.35 ± 0.84	3.36 ± 0.39	2.56 ± 0.18
bn100313288	4.40E-06 ± 7.60E-08	8.47 ± 0.95	6.70 ± 0.43	6.05 ± 0.21
bn100313509	2.54E-06 ± 4.00E-08	4.24 ± 1.24	3.16 ± 0.38	1.87 ± 0.21
bn100315361	2.58E-06 ± 4.30E-08	2.92 ± 1.02	1.69 ± 0.44	1.01 ± 0.17
bn100318611	1.90E-06 ± 2.00E-08	5.38 ± 1.03	3.42 ± 0.48	2.62 ± 0.22
bn100322045	5.71E-05 ± 2.13E-07	20.08 ± 1.65	18.98 ± 0.80	16.10 ± 0.38
bn100323542	2.04E-06 ± 1.27E-07	4.77 ± 1.01	3.87 ± 0.48	3.22 ± 0.22
bn100324172	4.28E-05 ± 1.72E-07	36.87 ± 1.30	34.25 ± 0.64	29.54 ± 0.30
bn100325246	1.33E-06 ± 1.70E-08	6.48 ± 0.99	5.24 ± 0.47	4.90 ± 0.24
bn100325275	3.35E-06 ± 4.20E-08	7.24 ± 1.19	5.86 ± 0.57	5.02 ± 0.26
bn100326294	3.82E-07 ± 5.90E-08	5.40 ± 0.96	3.80 ± 0.45	1.89 ± 0.20
bn100326402	1.18E-05 ± 2.71E-07	6.03 ± 1.03	4.48 ± 0.47	3.52 ± 0.21
bn100328141	1.01E-06 ± 2.40E-08	13.41 ± 0.76	10.09 ± 0.36	4.15 ± 0.14
bn100330309	4.30E-06 ± 5.30E-08	9.95 ± 1.35	7.86 ± 0.63	7.06 ± 0.29
bn100330856	6.20E-07 ± 1.30E-08	4.77 ± 0.73	3.17 ± 0.34	2.80 ± 0.17
bn100401297	1.90E-06 ± 2.80E-08	6.01 ± 1.11	4.89 ± 0.47	4.08 ± 0.21
bn100406758	1.12E-06 ± 3.30E-08	4.75 ± 0.70	3.66 ± 0.36	2.95 ± 0.18
bn100410356	8.29E-07 ± 3.80E-08	5.28 ± 1.57	3.70 ± 0.66	2.05 ± 0.32
bn100410740	6.21E-06 ± 3.11E-07	20.67 ± 3.88	13.23 ± 1.67	9.38 ± 0.72
bn100411516	2.14E-07 ± 2.00E-08	5.46 ± 0.94	2.59 ± 0.62	1.42 ± 0.22
bn100413732	1.05E-05 ± 8.40E-08	4.16 ± 0.91	2.87 ± 0.31	2.07 ± 0.17
bn100414097	8.85E-05 ± 1.86E-07	28.16 ± 1.05	25.61 ± 0.52	21.93 ± 0.24
bn100417166	3.31E-07 ± 5.00E-09	7.37 ± 0.87	4.09 ± 0.35	1.11 ± 0.13
bn100417789	1.36E-06 ± 4.90E-08	4.47 ± 1.01	2.18 ± 0.41	1.69 ± 0.20
bn100420008	4.31E-06 ± 3.70E-08	6.52 ± 0.68	5.49 ± 0.37	4.27 ± 0.18
bn100421917	6.69E-06 ± 2.01E-07	5.28 ± 0.99	4.20 ± 0.44	2.97 ± 0.19
bn100423244	7.92E-06 ± 1.21E-07	5.38 ± 0.76	3.99 ± 0.32	3.35 ± 0.15
bn100424729	7.41E-06 ± 5.70E-08	5.16 ± 2.00	3.93 ± 0.62	2.75 ± 0.29
bn100424876	1.49E-05 ± 1.72E-07	6.59 ± 0.81	5.22 ± 0.37	4.53 ± 0.18
bn100427356	2.28E-06 ± 6.00E-08	6.09 ± 0.89	4.77 ± 0.40	3.82 ± 0.19

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn100429999	2.79E-06 ± 4.30E-08	4.22 ± 0.72	2.79 ± 0.33	2.40 ± 0.16
bn100502356	1.56E-05 ± 2.08E-07	7.35 ± 0.84	6.24 ± 0.42	5.18 ± 0.20
bn100503554	1.73E-05 ± 4.10E-07	9.34 ± 0.75	7.75 ± 0.37	5.87 ± 0.18
bn100504806	2.33E-06 ± 1.26E-07	6.46 ± 2.31	4.44 ± 0.60	3.30 ± 0.36
bn100506653	2.42E-06 ± 5.30E-08	3.85 ± 0.84	3.40 ± 0.35	2.55 ± 0.18
bn100507577	9.97E-06 ± 1.15E-07	4.75 ± 0.95	3.55 ± 0.39	3.29 ± 0.20
bn100510810	3.72E-06 ± 5.10E-08	6.70 ± 1.21	6.23 ± 0.43	4.32 ± 0.22
bn100511035	3.00E-05 ± 1.03E-07	24.87 ± 1.01	21.75 ± 0.51	14.46 ± 0.23
bn100513879	3.71E-06 ± 5.20E-08	9.68 ± 0.99	8.56 ± 0.46	7.14 ± 0.22
bn100515467	6.11E-06 ± 5.10E-08	19.34 ± 1.00	17.98 ± 0.49	16.23 ± 0.24
bn100516369	1.88E-07 ± 1.30E-08	5.09 ± 1.06	3.20 ± 0.47	1.60 ± 0.20
bn100516396	1.84E-07 ± 1.90E-08	3.54 ± 0.47	2.25 ± 0.25	1.14 ± 0.12
bn100517072	6.59E-06 ± 1.70E-08	18.68 ± 1.19	16.09 ± 0.55	13.75 ± 0.26
bn100517132	1.27E-06 ± 4.60E-08	3.83 ± 0.87	2.38 ± 0.35	1.95 ± 0.15
bn100517154	2.79E-06 ± 3.30E-08	14.45 ± 1.58	11.64 ± 0.76	9.12 ± 0.37
bn100517243	2.69E-06 ± 4.30E-08	5.59 ± 0.85	5.34 ± 0.47	4.65 ± 0.22
bn100517639	2.91E-06 ± 1.29E-07	11.22 ± 1.24	9.83 ± 0.61	7.64 ± 0.30
bn100519204	2.07E-05 ± 2.27E-07	8.81 ± 0.84	7.28 ± 0.41	6.66 ± 0.19
bn100522157	3.86E-06 ± 4.10E-08	15.02 ± 0.95	13.44 ± 0.54	11.06 ± 0.25
bn100525744	6.44E-07 ± 9.50E-08	8.74 ± 0.96	5.31 ± 0.44	2.52 ± 0.19
bn100527795	1.39E-05 ± 4.50E-08	8.61 ± 1.47	7.39 ± 0.67	6.49 ± 0.31
bn100528075	2.71E-05 ± 5.10E-08	17.32 ± 1.01	15.57 ± 0.52	14.77 ± 0.25
bn100530737	4.82E-07 ± 2.10E-08	4.75 ± 0.77	2.68 ± 0.34	2.07 ± 0.16
bn100604287	5.51E-06 ± 4.20E-08	10.20 ± 1.19	8.09 ± 0.58	7.48 ± 0.27
bn100605774	7.57E-07 ± 2.20E-08	3.56 ± 0.95	2.84 ± 0.39	1.94 ± 0.21
bn100608382	1.70E-06 ± 2.10E-08	4.35 ± 1.14	2.93 ± 0.42	2.29 ± 0.19
bn100609783	1.74E-05 ± 6.07E-07	5.06 ± 0.88	3.53 ± 0.40	3.14 ± 0.19
bn100612545	2.24E-06 ± 3.40E-08	12.32 ± 1.03	9.29 ± 0.45	5.80 ± 0.20
bn100612726	1.36E-05 ± 3.60E-07	28.42 ± 1.26	26.83 ± 0.59	26.08 ± 0.29
bn100614498	1.96E-05 ± 3.26E-07	5.93 ± 0.80	6.44 ± 0.37	5.46 ± 0.16
bn100615083	8.72E-06 ± 8.20E-08	10.12 ± 0.96	9.45 ± 0.46	8.33 ± 0.22
bn100616773	2.76E-07 ± 1.70E-08	8.43 ± 1.34	5.27 ± 0.61	2.03 ± 0.26

Table 4—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn100619015	1.13E-05 ± 7.40E-08	13.06 ± 1.56	9.51 ± 0.72	7.40 ± 0.30
bn100620119	3.72E-06 ± 8.40E-08	5.44 ± 1.50	3.88 ± 0.47	2.85 ± 0.20
bn100621452	7.67E-06 ± 2.90E-07	4.66 ± 0.83	3.53 ± 0.37	3.14 ± 0.18
bn100621529	1.37E-07 ± 5.00E-09	2.87 ± 0.64	1.52 ± 0.29	1.12 ± 0.14
bn100625773	1.10E-06 ± 6.40E-08	16.54 ± 1.60	15.42 ± 0.84	4.90 ± 0.31
bn100625891	1.40E-06 ± 1.50E-08	3.00 ± 1.16	2.54 ± 0.39	1.71 ± 0.20
bn100629801	1.15E-06 ± 1.05E-07	18.79 ± 1.80	16.54 ± 0.87	8.76 ± 0.40
bn100701490	2.60E-05 ± 4.30E-08	61.92 ± 1.93	35.45 ± 0.74	22.92 ± 0.31
bn100704149	1.04E-05 ± 1.12E-07	9.24 ± 0.89	7.85 ± 0.43	7.01 ± 0.20
bn100706693	1.32E-07 ± 7.00E-09	3.84 ± 0.69	2.53 ± 0.35	0.52 ± 0.17
bn100707032	8.77E-05 ± 1.56E-07	54.94 ± 1.66	52.27 ± 0.84	48.32 ± 0.42
bn100709602	8.08E-06 ± 7.50E-08	5.78 ± 1.06	4.56 ± 0.48	3.75 ± 0.24

Table 5. GRB Fluence & Peak Flux (50–300 keV)

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn080714086	3.54E-07 ± 1.70E-08	1.52 ± 0.74	0.91 ± 0.36	0.43 ± 0.18
bn080714425	9.79E-07 ± 1.40E-08	1.03 ± 0.45	0.71 ± 0.19	0.46 ± 0.08
bn080714745	3.26E-06 ± 6.00E-08	4.41 ± 1.66	3.27 ± 0.71	2.82 ± 0.36
bn080715950	2.54E-06 ± 3.50E-08	10.70 ± 0.95	6.61 ± 0.45	3.83 ± 0.22
bn080717543	2.37E-06 ± 4.50E-08	2.14 ± 1.03	1.30 ± 0.47	1.05 ± 0.23
bn080719529	3.88E-07 ± 1.50E-08	0.59 ± 0.18	0.32 ± 0.08	0.23 ± 0.04
bn080720316	...	...	...	...
bn080723557	3.92E-05 ± 1.15E-07	21.19 ± 1.79	19.81 ± 1.09	15.14 ± 0.48
bn080723913	7.50E-08 ± 5.00E-09	2.62 ± 0.66	2.14 ± 0.32	0.69 ± 0.13
bn080723985	1.57E-05 ± 1.07E-07	5.92 ± 1.23	5.17 ± 0.54	4.85 ± 0.28
bn080724401	8.65E-06 ± 2.50E-08	10.71 ± 0.66	8.75 ± 0.30	4.76 ± 0.12
bn080725435	4.18E-06 ± 2.30E-08	2.48 ± 0.77	1.64 ± 0.32	1.38 ± 0.17
bn080725541	2.57E-07 ± 2.20E-08	2.99 ± 0.78	2.32 ± 0.36	0.92 ± 0.13
bn080727964	6.46E-06 ± 4.20E-08	2.65 ± 0.48	2.17 ± 0.33	1.71 ± 0.17
bn080730520	3.00E-06 ± 5.90E-08	3.70 ± 0.75	2.81 ± 0.41	2.48 ± 0.21
bn080730786	3.96E-06 ± 4.40E-08	8.75 ± 0.90	8.50 ± 0.45	7.06 ± 0.22
bn080802386	2.54E-07 ± 3.00E-09	6.33 ± 1.12	3.48 ± 0.50	1.38 ± 0.22
bn080803772	2.67E-06 ± 3.20E-08	1.86 ± 0.35	1.38 ± 0.29	1.11 ± 0.11
bn080804456	4.42E-06 ± 5.00E-08	1.62 ± 0.60	0.96 ± 0.27	0.76 ± 0.14
bn080804972	5.29E-06 ± 5.50E-08	2.52 ± 0.68	2.08 ± 0.37	1.85 ± 0.16
bn080805496	6.82E-07 ± 2.20E-08	1.10 ± 0.37	0.78 ± 0.17	0.47 ± 0.07
bn080805584	2.27E-06 ± 3.40E-08	1.66 ± 0.78	0.76 ± 0.32	0.51 ± 0.18
bn080806584	2.38E-07 ± 1.10E-08	1.19 ± 0.62	1.08 ± 0.32	0.75 ± 0.16
bn080806896	6.16E-06 ± 1.01E-07	3.83 ± 0.85	3.51 ± 0.42	2.72 ± 0.21
bn080807993	2.75E-06 ± 3.00E-08	9.23 ± 0.82	7.14 ± 0.39	4.12 ± 0.18
bn080808451	4.11E-07 ± 2.20E-08	1.21 ± 0.45	0.91 ± 0.23	0.72 ± 0.14
bn080808565	2.13E-06 ± 2.20E-08	2.45 ± 0.74	1.83 ± 0.44	1.67 ± 0.20
bn080808772	3.55E-06 ± 3.00E-08	1.13 ± 0.37	0.62 ± 0.20	0.38 ± 0.07
bn080809808	2.06E-06 ± 2.30E-08	2.59 ± 1.19	1.96 ± 0.58	1.23 ± 0.26
bn080810549	6.03E-06 ± 2.40E-08	2.56 ± 0.52	2.10 ± 0.23	1.36 ± 0.09
bn080812889	1.57E-06 ± 1.90E-08	1.68 ± 0.71	1.27 ± 0.37	0.82 ± 0.18
bn080815917	2.78E-07 ± 1.50E-08	2.62 ± 0.88	2.09 ± 0.46	1.40 ± 0.20

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn080816503	8.23E-06 ± 5.00E-08	5.64 ± 0.71	4.38 ± 0.35	3.06 ± 0.18
bn080816989	8.14E-07 ± 2.50E-08	4.11 ± 0.62	3.22 ± 0.29	2.25 ± 0.13
bn080817161	2.56E-05 ± 3.50E-08	8.14 ± 1.04	6.94 ± 0.52	6.65 ± 0.24
bn080817720	5.51E-07 ± 1.10E-08	4.17 ± 0.92	2.02 ± 0.53	1.38 ± 0.21
bn080818579	2.10E-06 ± 3.30E-08	3.71 ± 0.77	3.03 ± 0.40	2.14 ± 0.19
bn080818945	8.43E-07 ± 1.10E-08	2.41 ± 0.73	1.60 ± 0.43	1.20 ± 0.19
bn080821332	2.20E-06 ± 1.10E-08	5.49 ± 1.03	4.80 ± 0.59	4.31 ± 0.27
bn080823363	3.19E-06 ± 2.20E-08	2.23 ± 0.79	1.72 ± 0.46	1.39 ± 0.21
bn080824909	1.59E-06 ± 3.50E-08	5.94 ± 0.96	5.14 ± 0.52	2.93 ± 0.23
bn080825593	2.05E-05 ± 5.80E-08	16.65 ± 1.09	15.29 ± 0.60	12.66 ± 0.27
bn080828189	3.05E-07 ± 1.10E-08	2.12 ± 0.53	1.86 ± 0.29	0.76 ± 0.12
bn080829790	1.36E-06 ± 1.30E-08	2.77 ± 0.99	2.12 ± 0.54	1.71 ± 0.24
bn080830368	3.83E-06 ± 6.20E-08	2.99 ± 0.73	2.57 ± 0.38	2.29 ± 0.18
bn080831053	3.90E-08 ± 1.00E-08	2.68 ± 0.58	0.51 ± 0.22	0.15 ± 0.10
bn080831921	5.09E-06 ± 2.40E-08	2.24 ± 0.93	1.46 ± 0.49	1.24 ± 0.21
bn080904886	2.13E-06 ± 3.70E-08	3.79 ± 1.23	3.63 ± 0.57	2.92 ± 0.28
bn080905499	3.17E-07 ± 1.30E-08	4.55 ± 0.57	3.09 ± 0.31	1.31 ± 0.14
bn080905570	2.27E-06 ± 3.10E-08	1.81 ± 1.22	1.55 ± 0.57	1.19 ± 0.27
bn080905705	1.61E-06 ± 2.10E-08	1.13 ± 0.42	0.79 ± 0.16	0.58 ± 0.07
bn080906212	3.86E-06 ± 7.40E-08	13.02 ± 0.75	12.23 ± 0.37	10.19 ± 0.17
bn080912360	1.10E-06 ± 1.70E-08	1.23 ± 0.58	0.94 ± 0.29	0.78 ± 0.15
bn080913735	2.12E-06 ± 4.70E-08	2.70 ± 0.81	1.92 ± 0.40	1.32 ± 0.18
bn080916009	2.75E-05 ± 3.80E-08	7.32 ± 0.69	6.92 ± 0.33	6.28 ± 0.16
bn080916406	4.73E-06 ± 4.60E-08	4.20 ± 0.67	2.74 ± 0.30	2.08 ± 0.13
bn080919790	2.40E-08 ± 3.00E-09	0.99 ± 0.30	0.57 ± 0.12	0.15 ± 0.05
bn080920268	9.41E-07 ± 2.90E-08	1.19 ± 0.57	0.68 ± 0.24	0.50 ± 0.11
bn080924766	2.52E-06 ± 3.60E-08	2.29 ± 0.69	1.96 ± 0.36	1.61 ± 0.17
bn080925775	1.02E-05 ± 2.30E-08	8.58 ± 0.91	7.70 ± 0.46	6.90 ± 0.23
bn080927480	1.67E-06 ± 5.30E-08	1.44 ± 0.44	1.01 ± 0.22	0.64 ± 0.08
bn080928628	5.97E-07 ± 1.60E-08	1.69 ± 0.31	1.30 ± 0.16	0.83 ± 0.07
bn081003644	3.49E-06 ± 3.80E-08	2.56 ± 0.98	2.07 ± 0.46	1.03 ± 0.22
bn081006604	3.77E-07 ± 1.00E-08	3.06 ± 0.62	1.41 ± 0.30	0.47 ± 0.07

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn081006872	2.39E-07 ± 1.10E-08	1.99 ± 0.50	0.99 ± 0.17	0.45 ± 0.07
bn081008832	4.73E-06 ± 6.10E-08	1.73 ± 0.79	1.13 ± 0.30	0.92 ± 0.15
bn081009140	1.40E-05 ± 1.60E-08	39.93 ± 2.49	36.75 ± 1.23	30.43 ± 0.61
bn081009690	6.21E-06 ± 4.10E-08	3.98 ± 1.09	3.22 ± 0.46	2.83 ± 0.22
bn081012045	1.33E-07 ± 2.40E-08	1.82 ± 0.37	1.31 ± 0.15	0.89 ± 0.07
bn081012549	1.80E-06 ± 4.20E-08	1.45 ± 0.69	1.02 ± 0.31	0.90 ± 0.13
bn081017474	7.33E-07 ± 1.10E-08	1.78 ± 0.45	0.91 ± 0.17	0.69 ± 0.08
bn081021398	3.62E-06 ± 5.80E-08	2.86 ± 1.07	2.24 ± 0.47	1.81 ± 0.23
bn081022364	7.17E-07 ± 1.90E-08	1.41 ± 0.38	0.99 ± 0.19	0.79 ± 0.09
bn081024245	7.90E-08 ± 9.00E-09	3.78 ± 0.81	1.50 ± 0.24	0.57 ± 0.09
bn081024851	3.44E-06 ± 3.80E-08	1.82 ± 0.73	1.02 ± 0.37	0.70 ± 0.18
bn081024891	2.07E-07 ± 1.40E-08	3.60 ± 0.56	1.93 ± 0.26	1.07 ± 0.14
bn081025349	3.32E-06 ± 5.80E-08	2.98 ± 0.68	2.60 ± 0.36	2.14 ± 0.17
bn081028538	1.28E-06 ± 1.50E-08	3.14 ± 0.85	2.63 ± 0.43	2.01 ± 0.21
bn081101167	7.26E-07 ± 3.20E-08	1.73 ± 0.53	0.92 ± 0.26	0.58 ± 0.12
bn081101491	8.60E-08 ± 2.00E-09	3.32 ± 0.80	1.75 ± 0.37	0.43 ± 0.15
bn081101532	6.81E-06 ± 1.39E-07	6.24 ± 1.39	5.64 ± 0.64	4.96 ± 0.31
bn081102365	5.21E-07 ± 1.80E-08	2.91 ± 0.57	2.27 ± 0.29	1.38 ± 0.14
bn081102739	2.28E-06 ± 5.60E-08	1.83 ± 0.76	1.34 ± 0.40	0.92 ± 0.17
bn081105614	8.50E-08 ± 9.00E-09	3.50 ± 0.69	1.21 ± 0.24	0.32 ± 0.09
bn081107321	6.78E-07 ± 1.60E-08	5.08 ± 0.79	4.39 ± 0.40	3.05 ± 0.19
bn081109293	3.39E-06 ± 2.80E-08	1.70 ± 0.70	1.07 ± 0.40	0.79 ± 0.19
bn081110601	3.06E-06 ± 4.70E-08	11.00 ± 1.02	9.31 ± 0.57	7.13 ± 0.27
bn081113230	1.75E-07 ± 1.80E-08	3.96 ± 0.99	2.78 ± 0.47	1.15 ± 0.18
bn081115891	4.60E-08 ± 7.00E-09	2.70 ± 0.50	0.97 ± 0.15	0.35 ± 0.05
bn081118876	2.71E-06 ± 2.00E-08	3.41 ± 0.77	2.59 ± 0.37	2.32 ± 0.18
bn081119184	6.10E-08 ± 9.00E-09	2.43 ± 0.65	1.11 ± 0.22	0.42 ± 0.08
bn081120618	8.64E-07 ± 1.00E-08	1.67 ± 0.45	1.38 ± 0.22	1.20 ± 0.11
bn081121858	8.47E-06 ± 1.20E-07	7.17 ± 1.25	5.69 ± 0.75	3.50 ± 0.37
bn081122520	4.62E-06 ± 4.50E-08	9.44 ± 1.05	8.97 ± 0.52	6.09 ± 0.24
bn081122614	7.00E-08 ± 4.00E-09	3.62 ± 0.51	1.86 ± 0.19	0.45 ± 0.06
bn081124060	2.07E-06 ± 2.90E-08	2.17 ± 1.15	2.14 ± 0.55	1.74 ± 0.30

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn081125496	1.10E-05 ± 8.30E-08	14.90 ± 1.83	14.47 ± 0.90	12.76 ± 0.43
bn081126899	5.38E-06 ± 3.20E-08	4.28 ± 0.81	3.72 ± 0.39	3.34 ± 0.19
bn081129161	8.46E-06 ± 7.30E-08	9.78 ± 1.26	9.09 ± 0.64	6.91 ± 0.31
bn081130212	9.50E-08 ± 1.20E-08	1.22 ± 0.47	0.86 ± 0.20	0.41 ± 0.08
bn081130629	1.84E-06 ± 3.00E-08	2.72 ± 0.80	1.94 ± 0.37	1.72 ± 0.19
bn081204004	7.08E-07 ± 3.50E-08	2.77 ± 0.66	2.05 ± 0.30	1.45 ± 0.15
bn081204517	1.75E-07 ± 8.00E-09	6.45 ± 0.83	3.26 ± 0.36	0.93 ± 0.13
bn081206275	2.52E-06 ± 4.40E-08	2.01 ± 0.80	1.30 ± 0.41	0.89 ± 0.16
bn081206604	2.62E-07 ± 1.90E-08	0.66 ± 0.24	0.54 ± 0.12	0.45 ± 0.06
bn081206987	6.49E-07 ± 1.80E-08	0.85 ± 0.41	0.60 ± 0.14	0.41 ± 0.06
bn081207680	2.61E-05 ± 5.90E-08	3.34 ± 0.73	2.74 ± 0.34	2.41 ± 0.17
bn081209981	4.17E-07 ± 7.00E-09	11.82 ± 1.21	6.88 ± 0.54	1.82 ± 0.22
bn081213173	5.60E-08 ± 9.00E-09	2.96 ± 0.58	1.19 ± 0.20	0.36 ± 0.06
bn081215784	2.32E-05 ± 2.50E-08	70.61 ± 2.13	57.89 ± 1.00	31.29 ± 0.39
bn081215880	1.04E-06 ± 1.70E-08	3.08 ± 0.74	2.33 ± 0.34	1.33 ± 0.13
bn081216531	9.46E-07 ± 3.20E-08	16.66 ± 1.27	13.12 ± 0.57	4.17 ± 0.21
bn081217983	5.29E-06 ± 7.10E-08	3.50 ± 0.64	2.98 ± 0.30	2.67 ± 0.16
bn081221681	1.78E-05 ± 3.70E-08	12.01 ± 1.36	11.38 ± 0.64	11.06 ± 0.32
bn081222204	6.94E-06 ± 5.30E-08	6.63 ± 0.93	5.93 ± 0.45	5.30 ± 0.23
bn081223419	5.04E-07 ± 9.00E-09	7.70 ± 0.88	6.76 ± 0.42	2.68 ± 0.18
bn081224887	1.69E-05 ± 7.70E-08	13.46 ± 1.08	13.18 ± 0.55	12.85 ± 0.27
bn081225257	2.35E-06 ± 3.00E-08	1.30 ± 0.63	0.76 ± 0.29	0.64 ± 0.14
bn081226044	2.07E-07 ± 1.50E-08	3.32 ± 0.83	2.97 ± 0.39	1.04 ± 0.13
bn081226156	1.61E-06 ± 8.00E-09	1.45 ± 0.59	0.91 ± 0.37	0.75 ± 0.19
bn081226509	1.93E-07 ± 7.00E-09	5.13 ± 0.78	3.46 ± 0.33	0.95 ± 0.13
bn081229187	2.81E-07 ± 3.60E-08	2.66 ± 0.60	2.27 ± 0.33	0.75 ± 0.16
bn081229675	...	...	...	...
bn081230871	9.10E-08 ± 8.00E-09	2.37 ± 0.62	0.98 ± 0.30	0.51 ± 0.15
bn081231140	9.08E-06 ± 6.40E-08	7.30 ± 1.05	6.62 ± 0.50	4.96 ± 0.23
bn090101758	6.96E-06 ± 6.10E-08	6.44 ± 0.95	5.52 ± 0.55	4.84 ± 0.28
bn090102122	1.30E-05 ± 3.00E-08	10.01 ± 0.97	8.50 ± 0.47	6.45 ± 0.21
bn090107681	1.71E-06 ± 5.70E-08	2.37 ± 1.63	1.62 ± 0.69	0.97 ± 0.33

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090108020	5.17E-07 ± 9.00E-09	13.13 ± 0.75	8.97 ± 0.32	3.09 ± 0.11
bn090108322	1.83E-07 ± 8.00E-09	4.65 ± 0.68	3.46 ± 0.29	0.90 ± 0.09
bn090109332	1.07E-07 ± 9.00E-09	1.94 ± 0.82	1.00 ± 0.47	0.48 ± 0.22
bn090112332	2.15E-06 ± 3.70E-08	3.44 ± 0.60	2.78 ± 0.27	1.84 ± 0.11
bn090112729	5.54E-06 ± 5.40E-08	7.42 ± 1.32	7.13 ± 0.63	5.86 ± 0.29
bn090113778	8.27E-07 ± 2.60E-08	3.61 ± 0.71	2.56 ± 0.36	1.69 ± 0.17
bn090117335	6.96E-07 ± 2.40E-08	1.97 ± 0.50	1.55 ± 0.23	1.24 ± 0.11
bn090117632	6.00E-06 ± 8.70E-08	2.39 ± 0.62	1.72 ± 0.35	1.44 ± 0.17
bn090117640	9.85E-07 ± 2.20E-08	2.82 ± 0.98	2.68 ± 0.49	1.74 ± 0.21
bn090120627	3.82E-07 ± 1.10E-08	2.54 ± 0.63	1.66 ± 0.30	0.93 ± 0.15
bn090126227	4.92E-07 ± 9.00E-09	1.47 ± 0.67	0.93 ± 0.37	0.77 ± 0.18
bn090126245	2.02E-07 ± 1.10E-08	2.41 ± 0.48	1.39 ± 0.23	0.86 ± 0.11
bn090129880	2.70E-06 ± 2.80E-08	3.92 ± 0.77	2.88 ± 0.43	2.66 ± 0.21
bn090131090	8.64E-06 ± 2.80E-08	13.77 ± 1.52	12.75 ± 0.74	9.21 ± 0.35
bn090202347	2.93E-06 ± 1.40E-08	4.00 ± 0.77	3.49 ± 0.40	2.74 ± 0.20
bn090206620	2.61E-07 ± 7.00E-09	6.58 ± 0.73	4.33 ± 0.31	1.21 ± 0.09
bn090207777	1.43E-06 ± 2.20E-08	1.86 ± 0.40	1.37 ± 0.18	0.91 ± 0.07
bn090213236	6.61E-07 ± 3.30E-08	1.33 ± 0.43	0.84 ± 0.20	0.47 ± 0.10
bn090217206	1.14E-05 ± 1.80E-08	6.91 ± 0.69	5.52 ± 0.32	4.51 ± 0.14
bn090219074	9.30E-08 ± 2.60E-08	2.78 ± 0.97	1.58 ± 0.40	0.68 ± 0.15
bn090222179	1.93E-06 ± 3.00E-08	2.16 ± 0.70	1.67 ± 0.33	1.29 ± 0.17
bn090225009	7.20E-08 ± 8.00E-09	1.05 ± 0.68	0.64 ± 0.13	0.29 ± 0.07
bn090227310	1.50E-06 ± 1.20E-08	3.91 ± 0.61	1.75 ± 0.20	1.25 ± 0.09
bn090227772	1.86E-06 ± 2.30E-08	38.97 ± 4.66	25.90 ± 1.27	7.30 ± 0.33
bn090228204	1.76E-06 ± 1.30E-08	60.99 ± 2.19	25.46 ± 0.70	7.22 ± 0.19
bn090228976	5.42E-07 ± 3.90E-08	1.14 ± 0.38	0.83 ± 0.15	0.60 ± 0.08
bn090301315	1.14E-06 ± 1.60E-08	2.06 ± 0.63	1.58 ± 0.35	1.34 ± 0.18
bn090304216	4.80E-07 ± 5.30E-08	1.80 ± 0.52	1.28 ± 0.36	0.84 ± 0.14
bn090305052	7.73E-07 ± 6.00E-09	4.89 ± 0.51	4.08 ± 0.28	2.68 ± 0.15
bn090306245	7.13E-07 ± 1.90E-08	1.27 ± 0.35	0.67 ± 0.15	0.41 ± 0.06
bn090307167	5.54E-07 ± 2.00E-08	0.81 ± 0.26	0.46 ± 0.17	0.32 ± 0.06
bn090308734	1.01E-06 ± 1.40E-08	6.20 ± 0.71	4.78 ± 0.34	3.04 ± 0.17

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090309767	2.28E-06 ± 3.80E-08	2.00 ± 0.74	1.30 ± 0.43	1.00 ± 0.19
bn090310189	3.00E-06 ± 3.30E-08	2.90 ± 0.80	1.83 ± 0.40	1.39 ± 0.20
bn090316311	5.72E-07 ± 1.10E-08	4.25 ± 0.52	3.05 ± 0.29	1.17 ± 0.11
bn090319622	3.49E-06 ± 3.40E-08	2.12 ± 0.49	1.39 ± 0.18	0.99 ± 0.09
bn090320045	2.49E-07 ± 1.20E-08	0.93 ± 0.58	0.80 ± 0.25	0.55 ± 0.13
bn090320418	4.96E-07 ± 1.80E-08	1.49 ± 0.49	1.05 ± 0.31	0.74 ± 0.14
bn090320801	8.84E-07 ± 3.30E-08	2.00 ± 0.47	1.50 ± 0.21	0.99 ± 0.10
bn090323002	5.32E-05 ± 8.40E-08	8.41 ± 0.81	7.31 ± 0.40	6.24 ± 0.20
bn090326633	8.79E-07 ± 3.10E-08	1.90 ± 0.82	1.54 ± 0.45	1.27 ± 0.22
bn090327404	1.57E-06 ± 2.90E-08	1.65 ± 0.70	1.20 ± 0.31	0.98 ± 0.17
bn090328401	1.97E-05 ± 3.80E-08	11.90 ± 0.84	11.06 ± 0.41	8.30 ± 0.18
bn090328713	7.20E-08 ± 1.00E-08	5.80 ± 0.55	2.53 ± 0.20	0.61 ± 0.06
bn090330279	6.53E-06 ± 2.20E-08	3.22 ± 0.74	2.91 ± 0.35	2.23 ± 0.18
bn090331681	1.73E-07 ± 1.70E-08	3.98 ± 0.82	1.93 ± 0.35	1.00 ± 0.16
bn090403314	6.33E-07 ± 1.10E-08	1.41 ± 0.40	0.77 ± 0.13	0.49 ± 0.06
bn090405663	1.43E-07 ± 1.60E-08	4.00 ± 0.53	2.35 ± 0.23	0.71 ± 0.10
bn090409288	5.68E-07 ± 3.10E-08	1.12 ± 0.75	0.95 ± 0.38	0.44 ± 0.18
bn090411838	3.80E-06 ± 6.40E-08	4.45 ± 0.88	3.65 ± 0.49	2.65 ± 0.22
bn090411991	3.59E-06 ± 5.60E-08	3.84 ± 0.96	3.02 ± 0.50	2.04 ± 0.25
bn090412061	7.40E-08 ± 8.00E-09	2.37 ± 0.57	1.70 ± 0.24	0.45 ± 0.10
bn090413122	1.97E-06 ± 2.70E-08	2.50 ± 0.67	2.06 ± 0.33	1.32 ± 0.16
bn090418816	1.00E-07 ± 1.70E-08	3.10 ± 0.56	1.85 ± 0.25	0.74 ± 0.11
bn090419997	5.65E-06 ± 1.15E-07	1.79 ± 0.59	1.38 ± 0.29	1.24 ± 0.16
bn090422150	2.67E-07 ± 1.80E-08	1.71 ± 0.43	1.47 ± 0.22	0.80 ± 0.10
bn090423330	4.36E-07 ± 4.00E-08	1.26 ± 0.47	0.79 ± 0.20	0.58 ± 0.10
bn090424592	2.80E-05 ± 2.00E-08	64.98 ± 1.88	58.04 ± 0.99	45.97 ± 0.49
bn090425377	8.04E-06 ± 6.70E-08	6.71 ± 1.79	5.62 ± 0.79	4.64 ± 0.39
bn090426066	3.75E-07 ± 2.00E-08	1.40 ± 0.33	1.00 ± 0.16	0.78 ± 0.08
bn090426690	1.41E-06 ± 3.00E-08	3.03 ± 0.78	2.71 ± 0.41	2.29 ± 0.19
bn090427644	1.52E-07 ± 1.00E-08	1.42 ± 0.60	1.08 ± 0.29	0.76 ± 0.15
bn090427688	9.36E-07 ± 1.60E-08	1.75 ± 0.48	0.91 ± 0.20	0.63 ± 0.08
bn090428441	6.16E-07 ± 3.70E-08	5.08 ± 0.90	3.92 ± 0.50	2.26 ± 0.25

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090428552	2.80E-06 ± 6.20E-08	2.51 ± 0.96	2.09 ± 0.53	1.76 ± 0.27
bn090429530	1.67E-06 ± 5.10E-08	2.37 ± 1.16	1.59 ± 0.46	1.24 ± 0.22
bn090429753	3.93E-07 ± 1.40E-08	3.78 ± 0.83	3.27 ± 0.36	1.77 ± 0.15
bn090502777	1.73E-06 ± 1.60E-08	2.91 ± 0.51	2.23 ± 0.23	1.39 ± 0.10
bn090509215	3.22E-06 ± 5.00E-08	2.06 ± 0.72	1.41 ± 0.32	1.10 ± 0.17
bn090510016	9.01E-07 ± 1.00E-08	16.22 ± 1.58	8.99 ± 0.75	3.82 ± 0.24
bn090510325	3.17E-07 ± 1.60E-08	0.81 ± 0.32	0.65 ± 0.15	0.47 ± 0.07
bn090511684	8.25E-07 ± 2.30E-08	1.94 ± 0.68	1.44 ± 0.36	1.17 ± 0.19
bn090513916	2.68E-06 ± 9.20E-08	2.12 ± 0.77	1.73 ± 0.41	1.08 ± 0.16
bn090513941	4.83E-07 ± 1.40E-08	0.94 ± 0.34	0.64 ± 0.16	0.41 ± 0.09
bn090514006	3.34E-06 ± 5.30E-08	4.05 ± 0.75	3.11 ± 0.42	2.74 ± 0.19
bn090514726	1.30E-06 ± 1.90E-08	7.18 ± 1.03	6.57 ± 0.56	4.06 ± 0.26
bn090514734	4.99E-06 ± 9.60E-08	2.22 ± 0.97	1.64 ± 0.49	1.22 ± 0.24
bn090516137	9.68E-06 ± 9.70E-08	1.97 ± 0.65	1.41 ± 0.33	1.25 ± 0.16
bn090516353	9.11E-06 ± 2.60E-08	2.61 ± 1.01	1.77 ± 0.43	1.27 ± 0.23
bn090516853	2.25E-06 ± 3.70E-08	4.90 ± 1.07	4.09 ± 0.50	3.31 ± 0.24
bn090518080	4.28E-07 ± 1.00E-08	1.95 ± 1.16	1.48 ± 0.57	1.32 ± 0.31
bn090518244	1.38E-06 ± 4.50E-08	3.85 ± 1.00	3.06 ± 0.45	2.19 ± 0.22
bn090519462	2.12E-06 ± 2.30E-08	1.65 ± 0.91	1.49 ± 0.37	1.02 ± 0.19
bn090519881	1.81E-06 ± 2.20E-08	1.15 ± 0.62	0.76 ± 0.32	0.46 ± 0.15
bn090520832	1.61E-07 ± 1.40E-08	2.76 ± 1.01	1.79 ± 0.43	0.87 ± 0.19
bn090520850	2.06E-06 ± 5.60E-08	4.29 ± 1.00	2.90 ± 0.43	2.48 ± 0.21
bn090520876	2.65E-06 ± 2.20E-08	2.71 ± 0.86	2.32 ± 0.46	1.93 ± 0.23
bn090522344	8.84E-07 ± 1.80E-08	1.95 ± 0.81	1.45 ± 0.38	1.05 ± 0.20
bn090524346	9.49E-06 ± 3.70E-08	6.43 ± 0.85	6.22 ± 0.44	5.77 ± 0.22
bn090528173	2.78E-06 ± 4.60E-08	2.18 ± 0.84	1.41 ± 0.42	1.00 ± 0.20
bn090528516	2.45E-05 ± 4.40E-08	8.45 ± 0.85	7.38 ± 0.45	5.50 ± 0.21
bn090529310	5.64E-07 ± 1.90E-08	1.94 ± 0.72	1.57 ± 0.33	1.24 ± 0.16
bn090529564	4.85E-06 ± 1.90E-08	15.73 ± 1.15	12.99 ± 0.56	10.54 ± 0.27
bn090530760	3.14E-05 ± 8.30E-08	6.11 ± 0.90	5.47 ± 0.46	4.94 ± 0.23
bn090531775	1.60E-07 ± 1.10E-08	2.74 ± 0.56	1.61 ± 0.22	1.06 ± 0.09
bn090602564	1.15E-06 ± 2.80E-08	1.10 ± 0.57	0.73 ± 0.14	0.51 ± 0.08

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090606471	5.60E-07 ± 4.40E-08	2.48 ± 1.16	1.17 ± 0.47	0.74 ± 0.22
bn090608052	6.16E-07 ± 8.00E-09	1.44 ± 0.80	1.07 ± 0.36	0.67 ± 0.17
bn090610648	7.45E-07 ± 3.20E-08	1.90 ± 0.65	1.63 ± 0.29	1.48 ± 0.15
bn090610723	2.23E-06 ± 3.40E-08	1.49 ± 0.46	0.82 ± 0.17	0.59 ± 0.07
bn090610883	3.92E-07 ± 1.20E-08	1.02 ± 0.52	0.84 ± 0.21	0.54 ± 0.09
bn090612619	3.29E-06 ± 4.00E-08	4.22 ± 0.96	3.40 ± 0.47	3.22 ± 0.23
bn090616157	2.03E-07 ± 1.20E-08	1.57 ± 0.70	1.46 ± 0.32	0.98 ± 0.15
bn090617208	3.59E-07 ± 8.00E-09	9.74 ± 0.81	5.99 ± 0.38	1.52 ± 0.14
bn090618353	1.42E-04 ± 2.33E-07	35.50 ± 2.57	32.42 ± 1.25	29.98 ± 0.61
bn090620400	9.18E-06 ± 2.60E-08	13.18 ± 0.78	11.50 ± 0.38	9.75 ± 0.18
bn090620901	2.32E-07 ± 1.60E-08	1.76 ± 0.71	1.36 ± 0.29	1.06 ± 0.14
bn090621185	5.42E-06 ± 1.11E-07	1.93 ± 0.71	1.28 ± 0.38	1.03 ± 0.19
bn090621417	2.07E-06 ± 5.00E-08	2.36 ± 0.70	1.87 ± 0.36	1.41 ± 0.17
bn090621447	8.38E-07 ± 2.50E-08	1.37 ± 0.36	0.97 ± 0.17	0.71 ± 0.07
bn090621922	1.97E-07 ± 1.20E-08	5.80 ± 0.91	2.96 ± 0.37	0.92 ± 0.12
bn090623107	5.58E-06 ± 3.70E-08	5.01 ± 0.77	4.44 ± 0.38	3.23 ± 0.18
bn090623913	1.30E-06 ± 3.10E-08	2.59 ± 0.51	2.01 ± 0.22	1.16 ± 0.08
bn090625234	8.37E-07 ± 7.00E-09	1.45 ± 0.47	0.86 ± 0.25	0.59 ± 0.13
bn090625560	1.49E-06 ± 4.40E-08	2.72 ± 1.20	1.91 ± 0.53	1.27 ± 0.26
bn090626189	3.38E-05 ± 5.90E-08	27.26 ± 1.85	23.93 ± 0.83	16.05 ± 0.35
bn090626707	...	...	...	...
bn090629543	2.23E-07 ± 1.40E-08	0.80 ± 0.34	0.48 ± 0.17	0.25 ± 0.06
bn090630311	5.42E-07 ± 6.00E-09	2.79 ± 0.83	2.29 ± 0.41	1.84 ± 0.20
bn090701225	2.32E-07 ± 9.00E-09	1.69 ± 0.72	1.29 ± 0.36	1.05 ± 0.18
bn090703329	4.51E-07 ± 1.60E-08	1.84 ± 0.45	1.26 ± 0.21	0.74 ± 0.08
bn090704242	4.17E-06 ± 4.60E-08	2.60 ± 0.88	1.19 ± 0.45	0.77 ± 0.21
bn090704783	8.34E-07 ± 2.00E-08	1.03 ± 0.43	0.77 ± 0.21	0.57 ± 0.08
bn090706283	3.15E-06 ± 3.70E-08	1.54 ± 0.97	0.86 ± 0.43	0.61 ± 0.24
bn090708152	5.26E-07 ± 1.70E-08	0.78 ± 0.32	0.54 ± 0.14	0.37 ± 0.05
bn090709630	1.28E-06 ± 2.40E-08	2.04 ± 0.60	1.58 ± 0.30	1.34 ± 0.15
bn090711850	2.89E-06 ± 4.30E-08	2.73 ± 0.79	1.71 ± 0.44	1.48 ± 0.21
bn090712160	4.18E-06 ± 1.48E-07	1.95 ± 0.66	0.87 ± 0.28	0.76 ± 0.15

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090713020	5.39E-06 ± 1.90E-08	2.65 ± 0.79	1.60 ± 0.38	1.26 ± 0.18
bn090717034	1.31E-05 ± 3.90E-08	8.29 ± 0.92	6.89 ± 0.50	6.18 ± 0.24
bn090717111	1.57E-07 ± 1.30E-08	1.94 ± 0.50	1.74 ± 0.26	0.84 ± 0.13
bn090718720	1.90E-06 ± 1.90E-08	1.64 ± 1.02	1.12 ± 0.42	0.55 ± 0.20
bn090718762	1.36E-05 ± 5.60E-08	15.54 ± 1.29	14.52 ± 0.65	12.71 ± 0.33
bn090719063	2.69E-05 ± 8.20E-08	23.37 ± 1.61	21.86 ± 0.79	21.17 ± 0.39
bn090720276	2.00E-06 ± 1.60E-08	5.96 ± 1.31	4.80 ± 0.63	4.28 ± 0.31
bn090720710	4.82E-06 ± 1.10E-08	18.04 ± 0.98	14.59 ± 0.45	4.69 ± 0.14
bn090725838	1.29E-06 ± 2.60E-08	1.76 ± 1.11	1.38 ± 0.53	1.03 ± 0.27
bn090726218	3.06E-07 ± 1.00E-08	0.86 ± 0.38	1.03 ± 0.21	0.36 ± 0.05
bn090730608	1.92E-06 ± 4.30E-08	3.49 ± 0.41	3.00 ± 0.19	2.44 ± 0.09
bn090802235	5.79E-07 ± 1.80E-08	18.07 ± 1.75	10.58 ± 0.73	2.80 ± 0.24
bn090802666	1.45E-06 ± 3.20E-08	1.64 ± 0.98	1.18 ± 0.46	0.85 ± 0.24
bn090804940	9.73E-06 ± 7.20E-08	19.40 ± 1.68	18.70 ± 0.80	16.36 ± 0.41
bn090805622	2.50E-06 ± 2.80E-08	2.32 ± 1.45	1.31 ± 0.77	0.92 ± 0.34
bn090807832	5.53E-07 ± 1.30E-08	4.98 ± 0.50	3.85 ± 0.24	1.73 ± 0.09
bn090809978	1.20E-05 ± 7.00E-08	13.56 ± 1.16	12.52 ± 0.58	11.27 ± 0.28
bn090810659	4.53E-06 ± 4.20E-08	2.34 ± 1.38	1.63 ± 0.65	1.26 ± 0.32
bn090810781	2.47E-06 ± 2.90E-08	1.58 ± 0.71	1.09 ± 0.40	0.85 ± 0.19
bn090811696	4.59E-07 ± 1.10E-08	2.14 ± 0.83	1.43 ± 0.40	0.74 ± 0.20
bn090813174	1.81E-06 ± 2.20E-08	15.16 ± 1.10	10.02 ± 0.53	5.59 ± 0.25
bn090814368	2.78E-07 ± 3.00E-09	5.52 ± 0.67	4.37 ± 0.32	1.16 ± 0.12
bn090814950	8.73E-06 ± 1.91E-07	3.22 ± 0.96	2.60 ± 0.41	2.11 ± 0.20
bn090815300	7.86E-07 ± 2.30E-08	1.00 ± 0.44	1.07 ± 0.20	0.49 ± 0.06
bn090815438	2.44E-06 ± 8.00E-08	2.75 ± 1.07	2.34 ± 0.58	2.14 ± 0.28
bn090815946	1.52E-06 ± 1.50E-08	0.94 ± 0.40	0.52 ± 0.14	0.36 ± 0.05
bn090817036	2.54E-06 ± 5.90E-08	3.53 ± 0.70	1.92 ± 0.26	1.30 ± 0.10
bn090819607	1.36E-07 ± 8.00E-09	4.11 ± 0.70	2.37 ± 0.32	0.65 ± 0.13
bn090820027	9.11E-05 ± 8.80E-08	68.12 ± 2.98	67.23 ± 1.45	63.17 ± 0.71
bn090820509	5.47E-07 ± 2.00E-08	4.25 ± 0.82	2.64 ± 0.42	1.25 ± 0.15
bn090823133	1.43E-06 ± 2.80E-08	1.53 ± 0.94	1.23 ± 0.47	0.80 ± 0.22
bn090824918	1.77E-06 ± 3.20E-08	2.38 ± 1.14	1.29 ± 0.52	0.70 ± 0.25

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn090826068	4.75E-07 ± 2.30E-08	1.76 ± 0.68	1.50 ± 0.32	1.12 ± 0.16
bn090828099	1.28E-05 ± 1.02E-07	7.06 ± 1.21	6.27 ± 0.60	5.80 ± 0.30
bn090829672	3.83E-05 ± 8.40E-08	25.44 ± 1.35	20.88 ± 0.66	16.25 ± 0.32
bn090829702	2.67E-06 ± 2.70E-08	1.84 ± 0.58	1.38 ± 0.27	1.10 ± 0.14
bn090831317	4.82E-06 ± 2.90E-08	19.27 ± 1.56	9.00 ± 0.68	2.58 ± 0.26
bn090902401	7.35E-07 ± 2.20E-08	3.66 ± 0.74	3.14 ± 0.30	2.35 ± 0.15
bn090902462	9.44E-05 ± 1.77E-07	47.05 ± 1.92	39.91 ± 0.92	32.14 ± 0.44
bn090904058	1.16E-05 ± 1.13E-07	3.57 ± 0.67	2.96 ± 0.29	2.33 ± 0.14
bn090904581	8.69E-07 ± 1.50E-08	0.87 ± 0.39	0.46 ± 0.12	0.31 ± 0.06
bn090907017	2.81E-06 ± 6.50E-08	2.72 ± 1.03	1.73 ± 0.51	1.22 ± 0.24
bn090907808	5.84E-07 ± 1.20E-08	4.66 ± 0.51	4.48 ± 0.28	2.56 ± 0.11
bn090908314	1.92E-06 ± 4.00E-08	2.09 ± 0.76	1.56 ± 0.45	1.07 ± 0.23
bn090908341	1.25E-06 ± 6.00E-09	2.72 ± 0.71	1.65 ± 0.35	1.11 ± 0.16
bn090909487	3.06E-06 ± 8.60E-08	5.11 ± 1.57	2.39 ± 0.55	1.72 ± 0.25
bn090909854	1.03E-07 ± 1.10E-08	2.66 ± 0.45	1.37 ± 0.16	0.67 ± 0.07
bn090910812	1.07E-05 ± 1.16E-07	3.54 ± 0.72	2.60 ± 0.29	2.31 ± 0.15
bn090912660	5.66E-06 ± 8.80E-08	1.60 ± 0.35	1.11 ± 0.15	0.73 ± 0.07
bn090915650	1.72E-06 ± 2.70E-08	2.01 ± 0.83	1.29 ± 0.41	0.95 ± 0.20
bn090917661	5.84E-07 ± 2.00E-08	1.57 ± 0.35	1.05 ± 0.18	0.79 ± 0.08
bn090920035	1.75E-06 ± 2.00E-08	2.19 ± 1.45	1.23 ± 0.70	0.91 ± 0.33
bn090922539	6.42E-06 ± 2.70E-08	7.98 ± 0.87	7.37 ± 0.49	6.88 ± 0.23
bn090922605	2.46E-06 ± 5.30E-08	6.78 ± 1.39	4.19 ± 0.54	1.58 ± 0.19
bn090924625	1.71E-07 ± 7.00E-09	4.79 ± 0.82	2.98 ± 0.34	0.80 ± 0.15
bn090925389	4.97E-06 ± 1.61E-07	3.27 ± 0.97	2.53 ± 0.52	1.86 ± 0.24
bn090926181	7.44E-05 ± 1.79E-07	48.53 ± 1.56	48.06 ± 0.78	43.10 ± 0.37
bn090926914	6.68E-06 ± 8.20E-08	2.84 ± 0.89	2.21 ± 0.41	1.80 ± 0.22
bn090927422	1.24E-07 ± 9.00E-09	2.50 ± 1.09	1.60 ± 0.59	0.73 ± 0.27
bn090928646	1.16E-06 ± 2.80E-08	2.78 ± 1.13	1.97 ± 0.53	1.56 ± 0.30
bn090929190	3.86E-06 ± 5.10E-08	14.90 ± 1.66	13.54 ± 0.94	9.09 ± 0.41
bn091002685	1.63E-07 ± 6.00E-09	1.70 ± 0.59	1.45 ± 0.33	0.91 ± 0.17
bn091003191	1.20E-05 ± 3.70E-08	22.19 ± 2.11	19.68 ± 1.04	14.57 ± 0.49
bn091005679	7.91E-07 ± 3.30E-08	1.70 ± 0.70	1.27 ± 0.29	0.94 ± 0.13

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn091006360	7.80E-08 ± 1.00E-08	2.47 ± 0.52	1.93 ± 0.23	0.71 ± 0.10
bn091010113	6.00E-06 ± 3.00E-08	37.34 ± 1.75	33.35 ± 0.88	16.76 ± 0.39
bn091012783	8.03E-07 ± 2.30E-08	9.35 ± 1.09	6.35 ± 0.47	3.88 ± 0.19
bn091015129	7.88E-07 ± 2.60E-08	2.92 ± 0.97	2.10 ± 0.46	1.58 ± 0.20
bn091017861	2.38E-07 ± 8.00E-09	1.30 ± 0.45	1.09 ± 0.20	0.86 ± 0.09
bn091017985	1.15E-06 ± 1.70E-08	1.10 ± 0.38	0.99 ± 0.18	0.57 ± 0.07
bn091018957	1.16E-07 ± 1.40E-08	5.77 ± 2.68	3.46 ± 1.13	1.14 ± 0.41
bn091019750	6.10E-08 ± 3.00E-09	4.48 ± 0.69	1.28 ± 0.28	0.34 ± 0.13
bn091020900	4.52E-06 ± 8.10E-08	3.72 ± 1.07	3.33 ± 0.55	2.90 ± 0.27
bn091020977	5.22E-06 ± 2.90E-08	4.93 ± 0.60	4.08 ± 0.31	3.50 ± 0.15
bn091023021	2.56E-07 ± 1.00E-08	2.29 ± 0.59	1.51 ± 0.25	1.19 ± 0.12
bn091024372	4.97E-06 ± 3.50E-08	2.54 ± 0.66	1.49 ± 0.21	1.18 ± 0.10
bn091024380	1.47E-05 ± 2.70E-08	2.15 ± 0.58	1.37 ± 0.22	0.93 ± 0.09
bn091026485	3.15E-07 ± 1.20E-08	2.35 ± 0.96	1.48 ± 0.42	0.75 ± 0.20
bn091026550	7.17E-07 ± 2.70E-08	4.10 ± 2.06	2.09 ± 0.90	1.21 ± 0.49
bn091030613	2.57E-06 ± 1.90E-08	2.79 ± 0.64	2.04 ± 0.40	1.50 ± 0.20
bn091030828	1.40E-05 ± 8.40E-08	5.69 ± 0.90	5.15 ± 0.47	4.96 ± 0.22
bn091031500	8.04E-06 ± 4.50E-08	5.47 ± 0.85	4.28 ± 0.43	3.54 ± 0.22
bn091101143	4.27E-06 ± 4.40E-08	8.70 ± 1.15	6.80 ± 0.57	5.93 ± 0.28
bn091102607	1.06E-06 ± 6.30E-08	3.21 ± 0.91	2.11 ± 0.41	1.34 ± 0.20
bn091103912	3.30E-06 ± 6.40E-08	4.16 ± 0.63	3.67 ± 0.40	3.23 ± 0.20
bn091106762	7.85E-07 ± 3.80E-08	2.07 ± 1.48	1.03 ± 0.65	0.52 ± 0.29
bn091107635	5.37E-07 ± 2.30E-08	1.70 ± 0.32	1.14 ± 0.17	0.95 ± 0.08
bn091109895	1.15E-06 ± 2.90E-08	5.18 ± 0.63	4.37 ± 0.29	2.29 ± 0.12
bn091112737	4.04E-06 ± 2.90E-08	2.94 ± 0.80	2.04 ± 0.39	1.77 ± 0.19
bn091112928	2.65E-06 ± 2.70E-08	2.49 ± 0.67	1.62 ± 0.35	1.12 ± 0.17
bn091115177	8.38E-07 ± 3.20E-08	1.14 ± 0.40	0.55 ± 0.13	0.35 ± 0.05
bn091117080	1.85E-06 ± 2.40E-08	2.00 ± 0.51	0.88 ± 0.21	0.57 ± 0.10
bn091120191	1.61E-05 ± 2.00E-07	10.95 ± 1.08	10.07 ± 0.56	7.28 ± 0.26
bn091122163	6.90E-08 ± 1.70E-08	0.75 ± 0.25	0.65 ± 0.12	0.39 ± 0.06
bn091123081	1.14E-06 ± 4.80E-08	2.09 ± 0.63	1.54 ± 0.27	1.32 ± 0.14
bn091123298	3.40E-05 ± 2.00E-07	4.47 ± 1.15	3.69 ± 0.53	2.59 ± 0.25

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn091126333	2.24E-07 ± 1.70E-08	6.19 ± 0.92	4.50 ± 0.42	1.14 ± 0.15
bn091126389	...	...	...	...
bn091127976	9.43E-06 ± 2.00E-08	31.08 ± 2.04	25.97 ± 0.95	16.71 ± 0.45
bn091128285	2.34E-05 ± 2.38E-07	7.35 ± 1.26	6.01 ± 0.59	5.09 ± 0.26
bn091201089	4.48E-07 ± 1.00E-08	1.00 ± 0.45	0.65 ± 0.25	0.52 ± 0.12
bn091202072	8.76E-07 ± 2.00E-08	1.84 ± 0.71	1.11 ± 0.35	0.85 ± 0.18
bn091202219	3.47E-06 ± 8.40E-08	1.71 ± 0.80	1.50 ± 0.39	1.12 ± 0.18
bn091207333	2.94E-06 ± 5.80E-08	2.58 ± 0.80	1.97 ± 0.36	1.60 ± 0.18
bn091208410	3.17E-06 ± 9.90E-08	11.08 ± 1.43	10.47 ± 0.68	6.96 ± 0.32
bn091209001	5.46E-06 ± 1.02E-07	3.76 ± 0.95	2.25 ± 0.40	1.69 ± 0.19
bn091215234	4.38E-07 ± 3.00E-09	1.29 ± 0.35	0.81 ± 0.17	0.59 ± 0.08
bn091219462	4.51E-07 ± 1.30E-08	2.54 ± 0.48	2.11 ± 0.23	1.29 ± 0.09
bn091220442	3.10E-06 ± 2.50E-08	3.43 ± 0.95	2.71 ± 0.48	2.52 ± 0.24
bn091221870	5.27E-06 ± 9.30E-08	3.35 ± 0.73	2.76 ± 0.33	2.17 ± 0.16
bn091223191	1.56E-07 ± 2.00E-09	2.56 ± 0.61	1.80 ± 0.29	0.75 ± 0.14
bn091223511	5.27E-06 ± 3.30E-08	2.25 ± 0.82	1.57 ± 0.33	1.14 ± 0.15
bn091224373	1.41E-07 ± 7.00E-09	3.04 ± 0.87	1.72 ± 0.38	0.65 ± 0.15
bn091227294	3.81E-06 ± 5.70E-08	3.13 ± 0.80	2.28 ± 0.38	2.00 ± 0.19
bn091230260	1.06E-06 ± 2.30E-08	0.97 ± 0.32	0.60 ± 0.15	0.36 ± 0.07
bn091230712	1.50E-06 ± 4.80E-08	2.33 ± 0.92	1.45 ± 0.49	1.07 ± 0.24
bn091231206	5.58E-06 ± 1.06E-07	2.35 ± 0.63	2.01 ± 0.33	1.83 ± 0.17
bn091231540	4.06E-07 ± 1.60E-08	0.83 ± 0.45	0.62 ± 0.13	0.46 ± 0.06
bn100101028	2.50E-07 ± 9.00E-09	2.29 ± 0.79	1.34 ± 0.36	0.64 ± 0.12
bn100101988	3.75E-07 ± 1.20E-08	1.34 ± 0.55	1.15 ± 0.24	0.84 ± 0.12
bn100107074	9.10E-08 ± 1.10E-08	6.43 ± 1.49	1.70 ± 0.50	0.63 ± 0.23
bn100111176	6.01E-07 ± 9.00E-09	1.18 ± 0.91	1.05 ± 0.44	0.69 ± 0.19
bn100112418	5.56E-07 ± 6.00E-09	0.89 ± 0.34	0.49 ± 0.14	0.36 ± 0.06
bn100116897	1.28E-05 ± 6.10E-08	7.83 ± 1.03	7.06 ± 0.48	6.73 ± 0.23
bn100117879	1.98E-07 ± 2.70E-08	5.23 ± 0.86	3.61 ± 0.39	0.99 ± 0.14
bn100118100	7.91E-07 ± 5.20E-08	1.74 ± 0.97	1.55 ± 0.36	1.31 ± 0.17
bn100122616	5.79E-06 ± 8.60E-08	11.05 ± 1.69	10.29 ± 0.91	9.45 ± 0.44
bn100126460	5.31E-07 ± 3.20E-08	2.38 ± 0.82	1.19 ± 0.41	0.74 ± 0.16

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn100130729	4.69E-06 ± 4.70E-08	3.45 ± 0.80	2.57 ± 0.38	2.06 ± 0.20
bn100130777	7.37E-06 ± 7.40E-08	2.16 ± 0.69	1.74 ± 0.40	1.28 ± 0.18
bn100131730	4.29E-06 ± 4.40E-08	19.51 ± 1.36	16.46 ± 0.64	12.00 ± 0.27
bn100201588	5.41E-06 ± 3.10E-08	2.13 ± 0.56	1.18 ± 0.33	0.78 ± 0.18
bn100204024	6.09E-06 ± 8.00E-08	2.36 ± 0.68	2.25 ± 0.32	1.60 ± 0.17
bn100204566	1.97E-06 ± 2.20E-08	2.46 ± 1.26	1.60 ± 0.48	1.13 ± 0.29
bn100204858	1.71E-07 ± 1.50E-08	2.00 ± 0.86	1.66 ± 0.33	0.71 ± 0.15
bn100205490	7.95E-07 ± 1.40E-08	1.58 ± 0.80	1.26 ± 0.40	0.85 ± 0.20
bn100206563	3.43E-07 ± 8.00E-09	12.72 ± 0.98	6.12 ± 0.40	1.43 ± 0.14
bn100207665	1.26E-06 ± 2.60E-08	1.77 ± 0.90	1.41 ± 0.45	0.92 ± 0.18
bn100207721	2.28E-07 ± 1.20E-08	0.74 ± 0.60	0.40 ± 0.29	0.28 ± 0.15
bn100208386	4.30E-08 ± 3.00E-09	1.20 ± 1.07	0.92 ± 0.60	0.23 ± 0.22
bn100210101	1.21E-06 ± 1.40E-08	1.74 ± 0.72	1.16 ± 0.37	0.96 ± 0.19
bn100211440	7.80E-06 ± 7.90E-08	4.39 ± 1.32	3.46 ± 0.77	3.20 ± 0.37
bn100212550	1.52E-06 ± 3.60E-08	2.96 ± 0.72	2.75 ± 0.33	2.13 ± 0.16
bn100212588	2.06E-07 ± 8.00E-09	1.94 ± 0.86	1.50 ± 0.41	0.96 ± 0.21
bn100216422	1.50E-07 ± 8.00E-09	4.46 ± 0.76	2.68 ± 0.28	0.70 ± 0.11
bn100218194	1.55E-06 ± 6.10E-08	1.35 ± 0.51	0.67 ± 0.32	0.52 ± 0.15
bn100219026	1.74E-06 ± 3.10E-08	2.94 ± 1.08	1.51 ± 0.48	0.64 ± 0.22
bn100221368	1.05E-06 ± 1.60E-08	1.38 ± 0.67	1.11 ± 0.32	0.69 ± 0.16
bn100223110	3.09E-07 ± 3.00E-09	7.49 ± 0.87	4.58 ± 0.58	1.28 ± 0.20
bn100224112	5.77E-06 ± 1.87E-07	6.81 ± 1.06	6.22 ± 0.58	5.03 ± 0.29
bn100225115	3.06E-06 ± 4.90E-08	3.49 ± 0.61	2.70 ± 0.30	2.13 ± 0.15
bn100225249	3.25E-07 ± 3.30E-08	1.25 ± 0.61	0.69 ± 0.18	0.34 ± 0.09
bn100225580	3.45E-06 ± 6.10E-08	7.03 ± 0.82	6.29 ± 0.43	5.32 ± 0.20
bn100225703	8.14E-07 ± 2.30E-08	2.32 ± 0.60	2.02 ± 0.28	1.60 ± 0.14
bn100228544	1.46E-06 ± 2.70E-08	0.97 ± 0.73	0.55 ± 0.34	0.34 ± 0.16
bn100228873	3.43E-07 ± 9.00E-09	1.21 ± 0.74	0.75 ± 0.34	0.57 ± 0.17
bn100301068	1.41E-07 ± 7.00E-09	5.20 ± 1.05	2.24 ± 0.46	0.68 ± 0.20
bn100301223	1.38E-06 ± 3.30E-08	2.57 ± 0.80	1.86 ± 0.37	1.28 ± 0.19
bn100304004	3.13E-06 ± 8.30E-08	2.60 ± 1.31	1.60 ± 0.43	1.26 ± 0.27
bn100304534	2.65E-06 ± 8.90E-08	2.50 ± 1.10	2.08 ± 0.53	1.55 ± 0.27

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn100306199	3.26E-07 ± 1.40E-08	1.32 ± 0.40	0.81 ± 0.19	0.57 ± 0.09
bn100307928	7.13E-07 ± 1.20E-08	2.08 ± 0.71	1.35 ± 0.37	0.83 ± 0.18
bn100311518	1.43E-06 ± 5.40E-08	2.33 ± 0.84	1.44 ± 0.35	1.14 ± 0.16
bn100313288	2.77E-06 ± 3.40E-08	4.45 ± 0.72	3.66 ± 0.38	3.22 ± 0.21
bn100313509	1.30E-06 ± 2.20E-08	1.02 ± 0.38	0.74 ± 0.16	0.45 ± 0.06
bn100315361	1.36E-06 ± 2.40E-08	1.22 ± 0.40	0.67 ± 0.17	0.45 ± 0.08
bn100318611	9.50E-07 ± 1.10E-08	1.61 ± 0.82	0.82 ± 0.40	0.59 ± 0.20
bn100322045	2.94E-05 ± 1.07E-07	10.67 ± 0.84	9.39 ± 0.39	7.79 ± 0.19
bn100323542	1.07E-06 ± 7.10E-08	2.35 ± 0.93	1.61 ± 0.45	1.26 ± 0.22
bn100324172	1.95E-05 ± 9.80E-08	20.84 ± 1.26	19.50 ± 0.64	16.45 ± 0.30
bn100325246	5.74E-07 ± 8.00E-09	1.68 ± 0.77	1.40 ± 0.47	1.22 ± 0.24
bn100325275	2.11E-06 ± 2.80E-08	4.53 ± 0.63	3.51 ± 0.31	2.80 ± 0.14
bn100326294	2.43E-07 ± 3.60E-08	2.84 ± 0.51	2.13 ± 0.24	1.03 ± 0.11
bn100326402	6.18E-06 ± 1.33E-07	2.10 ± 0.74	1.40 ± 0.36	0.94 ± 0.20
bn100328141	3.72E-07 ± 1.20E-08	6.53 ± 0.62	5.53 ± 0.36	2.15 ± 0.14
bn100330309	2.44E-06 ± 2.80E-08	3.78 ± 0.50	3.16 ± 0.25	2.94 ± 0.12
bn100330856	3.07E-07 ± 7.00E-09	1.36 ± 0.67	0.83 ± 0.34	0.71 ± 0.17
bn100401297	9.64E-07 ± 1.50E-08	1.78 ± 0.38	1.73 ± 0.19	1.24 ± 0.08
bn100406758	7.23E-07 ± 2.20E-08	1.96 ± 0.71	1.44 ± 0.37	1.29 ± 0.18
bn100410356	4.55E-07 ± 2.10E-08	0.88 ± 0.34	0.81 ± 0.25	0.47 ± 0.09
bn100410740	2.93E-06 ± 1.51E-07	5.20 ± 2.37	3.82 ± 1.44	2.67 ± 0.69
bn100411516	1.15E-07 ± 1.00E-08	3.37 ± 0.47	1.24 ± 0.19	0.62 ± 0.08
bn100413732	6.18E-06 ± 4.50E-08	1.81 ± 0.82	1.12 ± 0.44	0.74 ± 0.19
bn100414097	3.34E-05 ± 1.04E-07	14.51 ± 1.05	13.34 ± 0.52	10.98 ± 0.24
bn100417166	1.75E-07 ± 2.00E-09	4.22 ± 0.71	2.24 ± 0.35	0.59 ± 0.13
bn100417789	8.95E-07 ± 2.90E-08	1.64 ± 0.86	0.75 ± 0.41	0.62 ± 0.20
bn100420008	2.54E-06 ± 2.00E-08	3.62 ± 0.84	2.90 ± 0.37	2.06 ± 0.18
bn100421917	4.16E-06 ± 1.21E-07	2.42 ± 0.93	1.79 ± 0.42	1.44 ± 0.20
bn100423244	4.02E-06 ± 5.90E-08	2.59 ± 0.59	2.14 ± 0.32	1.89 ± 0.15
bn100424729	3.97E-06 ± 3.10E-08	2.09 ± 0.52	1.25 ± 0.20	0.75 ± 0.08
bn100424876	7.49E-06 ± 7.00E-08	3.18 ± 0.81	2.57 ± 0.37	2.08 ± 0.18
bn100427356	1.28E-06 ± 3.50E-08	2.85 ± 0.82	1.88 ± 0.39	1.30 ± 0.20

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn100429999	1.69E-06 ± 2.40E-08	2.10 ± 0.66	1.28 ± 0.34	0.94 ± 0.16
bn100502356	8.66E-06 ± 1.05E-07	3.36 ± 0.61	2.86 ± 0.37	2.48 ± 0.20
bn100503554	9.69E-06 ± 2.03E-07	5.11 ± 0.75	4.16 ± 0.36	2.71 ± 0.18
bn100504806	1.06E-06 ± 5.80E-08	0.96 ± 0.36	0.75 ± 0.15	0.56 ± 0.07
bn100506653	1.41E-06 ± 3.40E-08	1.97 ± 0.74	1.23 ± 0.38	0.94 ± 0.18
bn100507577	7.14E-06 ± 6.10E-08	2.77 ± 0.52	2.09 ± 0.24	1.82 ± 0.12
bn100510810	1.86E-06 ± 4.10E-08	2.81 ± 1.06	1.35 ± 0.52	1.07 ± 0.26
bn100511035	1.27E-05 ± 3.80E-08	11.89 ± 1.06	10.12 ± 0.51	6.40 ± 0.23
bn100513879	2.19E-06 ± 3.00E-08	3.65 ± 0.85	3.03 ± 0.42	2.52 ± 0.22
bn100515467	3.47E-06 ± 2.90E-08	8.65 ± 1.00	7.71 ± 0.48	6.68 ± 0.24
bn100516369	1.11E-07 ± 8.00E-09	3.14 ± 0.49	1.35 ± 0.17	0.53 ± 0.06
bn100516396	9.10E-08 ± 9.00E-09	1.75 ± 0.47	1.25 ± 0.25	0.50 ± 0.12
bn100517072	3.15E-06 ± 8.00E-09	3.97 ± 0.95	3.53 ± 0.47	3.13 ± 0.24
bn100517132	6.86E-07 ± 2.80E-08	1.50 ± 0.71	1.25 ± 0.29	0.92 ± 0.15
bn100517154	1.27E-06 ± 1.60E-08	6.97 ± 0.75	5.08 ± 0.34	3.10 ± 0.15
bn100517243	1.17E-06 ± 2.50E-08	1.45 ± 0.68	1.26 ± 0.47	1.02 ± 0.21
bn100517639	1.81E-06 ± 7.20E-08	5.18 ± 0.64	4.66 ± 0.31	3.17 ± 0.14
bn100519204	1.15E-05 ± 1.17E-07	2.88 ± 0.80	2.32 ± 0.29	2.15 ± 0.16
bn100522157	2.28E-06 ± 2.90E-08	8.91 ± 0.95	4.93 ± 0.47	3.87 ± 0.25
bn100525744	4.23E-07 ± 4.70E-08	5.60 ± 0.96	3.17 ± 0.44	1.31 ± 0.21
bn100527795	8.36E-06 ± 3.70E-08	4.33 ± 0.66	3.70 ± 0.32	3.13 ± 0.15
bn100528075	1.41E-05 ± 2.70E-08	7.37 ± 1.06	6.56 ± 0.52	6.22 ± 0.25
bn100530737	2.72E-07 ± 1.00E-08	1.40 ± 0.57	1.09 ± 0.36	0.81 ± 0.16
bn100604287	3.05E-06 ± 2.10E-08	3.45 ± 1.14	3.07 ± 0.55	2.85 ± 0.27
bn100605774	4.34E-07 ± 1.20E-08	1.08 ± 0.39	0.78 ± 0.13	0.51 ± 0.06
bn100608382	9.22E-07 ± 1.10E-08	1.62 ± 0.41	1.06 ± 0.19	0.87 ± 0.09
bn100609783	1.14E-05 ± 3.41E-07	2.68 ± 0.81	1.82 ± 0.37	1.28 ± 0.17
bn100612545	6.06E-07 ± 1.80E-08	5.27 ± 0.97	4.21 ± 0.46	2.62 ± 0.21
bn100612726	8.58E-06 ± 2.07E-07	11.81 ± 1.13	11.34 ± 0.54	10.91 ± 0.28
bn100614498	8.92E-06 ± 1.41E-07	1.64 ± 0.80	1.14 ± 0.39	1.01 ± 0.18
bn100615083	4.86E-06 ± 4.40E-08	3.42 ± 0.82	3.07 ± 0.40	2.73 ± 0.20
bn100616773	1.37E-07 ± 9.00E-09	4.24 ± 1.34	2.53 ± 0.60	0.76 ± 0.26

Table 5—Continued

Trigger ID	Fluence (erg cm ⁻²)	PF64 (ph cm ⁻² s ⁻¹)	PF256 (ph cm ⁻² s ⁻¹)	PF1024 (ph cm ⁻² s ⁻¹)
bn100619015	5.95E-06 ± 4.10E-08	3.33 ± 1.02	2.52 ± 0.64	2.10 ± 0.32
bn100620119	2.39E-06 ± 4.30E-08	2.66 ± 0.86	1.86 ± 0.37	1.54 ± 0.20
bn100621452	4.23E-06 ± 1.50E-07	2.10 ± 0.77	1.53 ± 0.35	1.35 ± 0.18
bn100621529	8.30E-08 ± 3.00E-09	1.55 ± 0.64	0.71 ± 0.32	0.46 ± 0.14
bn100625773	4.56E-07 ± 3.60E-08	10.54 ± 1.73	8.49 ± 0.84	2.32 ± 0.30
bn100625891	7.99E-07 ± 8.00E-09	1.13 ± 0.32	0.70 ± 0.13	0.43 ± 0.06
bn100629801	7.43E-07 ± 5.60E-08	10.11 ± 1.80	8.55 ± 0.87	3.88 ± 0.39
bn100701490	8.52E-06 ± 2.40E-08	24.71 ± 1.93	15.06 ± 0.74	9.81 ± 0.31
bn100704149	6.06E-06 ± 6.20E-08	4.28 ± 0.86	3.68 ± 0.41	3.33 ± 0.20
bn100706693	6.50E-08 ± 3.00E-09	2.40 ± 0.69	1.26 ± 0.35	0.29 ± 0.17
bn100707032	4.36E-05 ± 7.80E-08	31.96 ± 1.72	31.24 ± 0.84	29.01 ± 0.42
bn100709602	5.00E-06 ± 4.60E-08	3.04 ± 1.06	2.10 ± 0.47	1.60 ± 0.22